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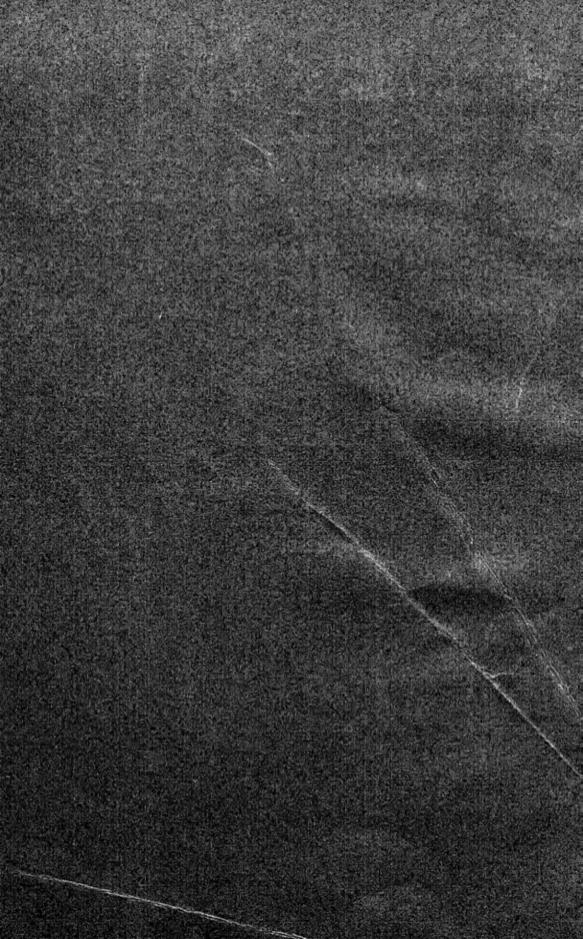
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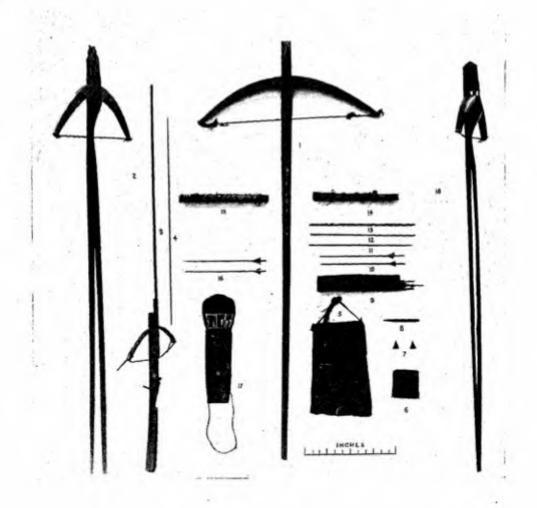
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CROSSBOWS AND ARROWS FROM EQUATORIAL AFRICA.

(Powell-Cotton Museum, Birchington.)

Fig. 1. Crossbow No. 308, Badi Medjambi, French Congo. Fig. 2. Crossbow No. 231, Ozala, Bakota, French Congo. Fig. 3. Crossbow, boy's, No. 311, Badi Medjambi, French Congo. Fig. 4. Arrow for 311. Fig. 5. Hide case No. 240, Ozala, Bakota, French Congo, for carrying Nos. 6-15. Fig. 6. Hide pouch for cut leaves. Fig. 7. Cut leaves for arrows. Fig. 8. Spatula for spreading poison. Fig. 9. Hide quiver for poisoned arrows. Fig. 10. Arrows with poisoned tips. Figs. 11, 12, 13. Arrows in the making. Fig. 14. Bundle of new arrows not feathered or poisoned. Fig. 15. Bundle of new arrows poisoned and wrapped for protection. Fig. 16. Arrows for No. 18. Fig. 17. Quiver of arrows for 18. Fig. 18. Crossbow, Fanwe, Benito River, Spanish Guinea.

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ORIGINAL ARTICLES.

With Plate A.

Africa, West: Technology.

Powell-Cotton.

Notes on Crossbows and Arrows from French Equatorial Africa.

By Major P. H. G. Powell-Cotton. With Plate A.

I first noticed these in use at Ozala (14" N., 14° 50" E.) in the Bakota district, but was told they had been brought from the Medjambi people further north.

I cannot find this name on the map. Bokiba appears to occupy the place where it

should be.

As I proceeded northwards and eastwards they became common. At Fort more Soufflet (N'Goila) on the Dscha river, and on the east bank of the Sanga at Bayanga, 2° 50" N., 16° 20" E., practically every man was armed with them. The Agent of the Compagnie Haut - Congo Française me that Ozala told Medjambi, Bakuele and Sanga tribes were the principal ones to use them.

Of the eight bows I collected, the stocks measure 3 feet 11 inches to 4 feet 8½ inches, the heads being ornamented with more or less



carving. They vary in section: 324 is septangular; 374 is hexagonal, with the sides nearly equal; 371 hexagonal, but the back of the lower limb very narrow; 204, 308 (Plate A, Fig. 1) and 372, have the lower limb rounded from the tail for

half its length or less; 231 has the lower limb rounded for half its length, and

the upper limb for 6 inches (Plate A, Fig. 2).

The bows measure across the arc 1 foot $9\frac{1}{2}$ inches to 2 feet, and are tightly fixed into the stock head with leather and wooden wedges at 4 inches to $4\frac{7}{8}$ inches from the extreme end. The stock is cut away underneath just below the bow piece, and tapers to the tail. It is split from the tail to within 4 inches to 5 inches of the bow. At about $8\frac{3}{4}$ inches from the bow there is a transverse notch to hold the bow-string when drawn. To the lower limb of the split stock a small square peg is fixed which projects through the upper limb and forces the string out of the notch when the two halves of the stock are pressed together. Just in front of this notch is a slight longitudinal depression, in which a small quantity of beeswax is placed. The supply of this is kept daubed beside the carved wood under the stock. Many of the stocks appear to have been in use for many years, but the bow is apt to split, and is renewed from time to time. Only in one specimen (No. 308, Badi, 18/6/27) is the bow apparently of the same age as the stock, which is also the only stock with a carved pattern down the front.

The strings are of vegetable fibre (seseli?) and, as is usually the case, were more difficult to procure than the bows themselves, as the natives, unless specially watched, invariably remove them before sale of the bow. The bows are carried

unstrung until required for use.

The arrows are made of cane, a length of about 12 to 13 inches being cut off and the cane split into sections of about $\frac{1}{8}$ inch square. These are neatly rounded off for the whole length, with the exception of some $1\frac{1}{2}$ inches, left as a grip. The end is then pointed and the arrow cut off at a uniform length of $11\frac{1}{4}$ inches (Plate A, Figs. 11-13). They are generally kept in this state tied in a bundle (Plate A, Figs. 14 and 15) till wanted, when the base is split and a triangular piece of green leaf (Plate A, Fig. 7) with approximately $\frac{7}{8}$ -inch sides is inserted; three to five nicks are cut at 2 inches below the point, and the poison is spread evenly with a spatula (Plate A, Fig. 8) from point to nicks (Plate A, Fig. 10). The effect of this ring of nicks is that it ensures the arrowhead breaking off in the wound instead of possibly being dragged out.

The poison is obtained from the seed of a vine called by the natives nea (Strophanthus gratus, Franch: a member of the Apocynaceæ—Kew identification) allied to digitalis. The principal toxic constituent is strophanthin, which has been shown to be identical with ouabain, originally obtained from Acocanthera schimperi.* The pods are dried, the seed ground fine and mixed to a paste with cold water. It is said to remain effective for a month, and the stricken beast, even a gorilla, vomits and falls dead at once.

One man solemnly informed me that it was these seeds that the serpents eat to get their venom.

The arrows, when feathered and poisoned, are carried in a small skin quiver

(Plate A, Fig. 9).

I only succeeded in buying one complete outfit (No. 240) at Ozala on 19th April 1927—now in the Powell-Cotton Museum, Birchington. It consists of a bag of undressed forest duiker skin, 12 inches by $7\frac{1}{2}$ inches, sewn at the bottom and up the centre of the front with cane, a 4-inch flap at the top folded and shaped to form a cover, with a string of bark fibre to carry on the left shoulder. A cane strand is tied into the side of the bag to form a carrier for a round piece of wood, $1\frac{3}{4}$ inches by $\frac{3}{16}$ inches diameter, used to keep the movable portion of the stock of the crossbow open while adjusting the arrow. The bag contained:—

(1) A quiver of undressed forest duiker, 10 inches by 2 inches, sewn with

cane, containing 13 finished arrows.

^{*} See A. R. Cushny, "The Action of Digitalis and its Allies," p. 9. (London, 1925.)

(2) Forty-four unfinished arrows tied in a bundle.

(3) An undressed skin bag without flap, 3\(\frac{3}{4}\) inches by 3\(\frac{1}{2}\) inches, sewn up the sides and along one side of the top with a chain stitch of cane, filled with leaves cut to a triangle, and two spatulas, one measuring 4\(\frac{3}{4}\) inches by \(\frac{3}{8}\) inch.

(4) A leaf packet of the poison seeds.

To operate the crossbows—having strung the bow by pressing one end of it on the ground and forcing the other down with the right hand, while the left places the loop of the string in position—the two limbs of the stock are separated and a little piece of loose wood, some 2 inches long by less than I inch diameter, is inserted, the tail end of the stock placed on the ground, and the string forced down and engaged in the transverse notch, which retains it. The arrow is placed in position in the groove in front of the bow-string and pressed down so that the beeswax holds it. The forefingers of the left hand take the place of the piece of wood; aim is taken, the fingers withdrawn, and the two limbs of the stock pressed together, which brings up the small wooden peg attached to the lower limb and forces the string out of the notch against the arrow butt.

Boys carry an adaptation of this in the shape of a wooden gun (Plate A, Fig. 3). A roughly cut "stock" with a bow at the fore end, fitted with a cane bow-string, which is held and released by a trigger, fires a dart (Plate A, Fig. 4) through a long

reed barrel. The weapon measures 4 feet 1 inch over all.

Since writing the above, Mr. T. Alexander Barns has presented me with a crossbow and quiver, which he obtained from the Fanwe tribe on the Benito

river in Spanish Guinea (Plate A, Fig. 18).

It has the following variations from those I collected: on the back limb there is no rib on the under surface extending to the head, but the limb is rounded for the whole of its length. The under part of the swan neck is flat and without carving. The head forms an obtuse angle instead of being carved to a chisel shape. The stock is grooved at the tail end to take a closed brass wire ring, which holds the limbs together. The bow is rounded on the convex surface, instead of the edges being square.

The quiver of undressed forest duiker skin with flap and fibre string sling measures 12 inches by 3 inches at the base, and 4 inches at the flap, sewn with

fibre string and bound with plaited cane (Plate A, Fig. 17).

The arrows, 111 inches in length, are more finely tapered towards the point

and have no nicks. (Plate A, Fig. 16). The poison had been removed.

Mr. Barns informed me that he found the crossbow the universal weapon of Spanish Guinea, where the natives made good practice, up to approximately 30 yards. When about to "load," the arrow is held in the mouth. In Fernando Po he saw more of these crossbows.

All the specimens illustrated are in the Powell-Cotton Museum, Birchington.
P. H. G. POWELL-COTTON.

Britain: Archæology.

Vulliamy.

The Problem of the Pre-Chellean Industries. By C. E. Vulliamy.

Mr. Reid Moir's fascinating book, "The Antiquity of Man in East Anglia,"

represents the most honest attempt which has yet been made to demonstrate the existence of Tertiary Man and to establish a clear sequence of Pre-Palæolithic industries. But to those of us who are still unconvinced, and to whom the present state of knowledge does not seem to warrant conviction in these matters, it remains an inconclusive document. It may not be wholly inopportune to examine briefly certain considerations which have a vital bearing on the problem, and

which are too often evaded on the one hand and insufficiently appreciated on the other.

First, there is the biological objection, based on the evidence of the fossil remains of man. We must remember that the production of the simplest form of implement requires a degree of specialised co-ordination and a corresponding anatomical development which are incompatible with the status of a sub-human being. Pithecanthropus, essentially a sub-human fossil, belongs, at the earliest, to a basic Pleistocene deposit—a deposit presumably contemporaneous with the First Interglacial period in Europe. The fossil is that of a creature who lived in conditions which were favourable to the development of a human type. Nothing resembling an artifact has been found on the horizon in which the remains of Pithecanthropus were deposited. But, if Mr. Reid Moir is correct, the East Anglian contemporaries of this archaic precursor, the "men" of the Cromer Forest Bed, were already producing standardised forms of "hand-axes," "scrapers," and "points."

Let us move to a later stage. The Heidelberg jaw comes from a Middle Pleistocene deposit. It is the relic of a definitely humanoid creature, possessing already the characteristic human dentition. He has been referred by the most competent authorities to a date corresponding to that at which we might expect to find traces of an early Chellean industry. But at Mauer, as at Trinil, no

artifacts have been found on the level of the discovery.

The Piltdown fossil would appear to be of later date than that of Heidelberg, and here indeed we have artifacts, both of flint and of bone, associated with the remains of an extremely primitive form of man. Yet, even here, in the absence of any stratigraphical proof, it cannot be denied that the association may be purely fortuitous.

Examined without prejudice, the evidence at our disposal does not tend to support the view that any primate of Pliocene times could have reached a stage of development compatible with the making of tools and the repetition of standardised implemental forms. We have reason, on the contrary, for helieving that such a stage was not reached until the later phases of the Pleistocene period. The humanoids of Pliocene and early Pleistocene times, even if they can be imagined as capable of using tools or of having any necessity for using them, were amply provided with implements of natural production, including the "rostrocarinate." And we shall do well to remind ourselves that flints of accidental form, exquisitely flaked and shaped, and greatly superior in "technique" to anything which has been found on the Pliocene levels of East Anglia, have been extracted from the base of the Parisian Eccene. I would particularly draw the attention of those who are interested in this matter to Figs. 39, 41, 43, 63, 67 and 68 in Breuil's masterly exposition (L'Anth., XXI, 1910). It is evident, therefore, that the best "eolithic" productions were made at a time which precedes, by some millions of years, the earliest date at which the human type could possibly have come into existence.

The question of the morphology of the alleged Pliocene and Early Pleistocene artifacts has been so admirably and so recently dealt with by Mr. Hazzledine Warren that there seems little occasion to revive this particular dispute. At the same time, I must accuse the defenders of the "rostro-carinate," either of inadequate experience or else of a deliberate suppressio veri. The "rostro," in its most ideal form, is freely produced by nature, at all periods and in various materials. It is, indeed, impossible to search for any length of time, for implements or fossils, on fields or in gravel pits, without coming across admirable specimens of this form; neither is it lacking among the geological material of all ages, from the Silurian onwards, which is crushed and rolled upon our beaches. This evidence,

alone, is sufficient to dispose of the "rostro" as necessarily an implement, apart from the fact that the flaked surfaces of the chosen specimens do not exhibit the least indication of intentional manufacture. The only convincing specimens are those which are made, not by "eolithic" man, but by an advanced representative of homo sapiens—Mr. Reid Moir himself.

An examination of the larger specimens from the Cromer Forest Bed leads irresistibly to another objection, again based on the morphology of the pieces themselves. Many of them have been produced by an immense number of blows, and the resulting forms are perfectly useless for any conceivable purpose. They could neither be grasped in the hand nor utilised for any practical need. Even if it could be assumed that the flaking was intentional, it is beyond belief that any creature would spend so much of his time and energy in producing shapeless lumps of stone, in no way more desirable than the lumps already provided by nature.

A similar objection—the absence of purposive form—holds good in the case of small pieces of the Foxhall type. Here, again, the selected flints are neither better nor worse, as tools, than the other natural fragments which exist by the million on the same level. (And it may be observed, in passing, that the correspondence between the size of any given series of "eolithic" flints and the size of the accidentally broken material in their environment is remarkable—to say the least of it.) The intentional simulation of such pieces would present considerable difficulty, and would serve no purpose. If Tertiary Man did exist, and if these flints are proof of his handiwork, we must be prepared to conclude that he combined great manipulative skill with a degree of persistent idiocy which has no parallel in modern times.

It is reasonable to believe that the flake represents the earliest form of manufactured implement, and that such flakes are to be found on late horizons of the Mindel-Riss period, at earliest. This, I believe, corresponds with the views of Obermaier. Thus, while we have no reason for supposing that Heidelberg man was incapable of making simple tools, it is certainly remarkable that no implements

have been found in the sands which contained his jaw-bone.

Those who accept these views will agree (a) that we have no indisputable proof of the existence of man in Tertiary times, and (b) that the necessary proof could only be made clear by the anatomical character of fossil remains of unquestionable Tertiary date. It is absurd to suppose that "industries" which are admittedly separated from each other by the vast duration of glacial periods, with their corresponding geological changes, can yet be closely related, and show an uninterrupted development of technique. Our evidence, so far, does not confirm the belief that the human status had been reached at an age anterior to the Middle Pleistocene.

C. E. VULLIAMY.

Sociology.

Torday.

Bride-price, Dower, or Settlement. By E. Torday.

Modern writers on African sociology are practically agreed that marriage among the natives does not consist of the buying and selling of the bride; Mr. Bryant, I believe, is the only serious supporter of this fallacy.¹ Whatever havoc Chaka's rule may have played with ancient institutions, the law still prevails among the Amazulu that the bride remains a member of her clan after her marriage,² and the Commission inquiring into South African laws and customs came to the conclusion that lobolo is neither dower nor the price of a purchase; a basket of corn, a hoe, or any trifle seals the contract as well as many heads of cattle.² Acute observers have long ago refuted the idea of bride purchase. Father Merolla stated, in the seventeenth century: "It must be observed that

"the Father of the Bride, when he receives the Present for her, tho' it be ever "so little, must not complain, for that would be no better than selling his " Daughter. Wherefore to prevent such a Crime, all Men are tax'd by the Publick " in those Matters, how much they shall give, and which is always rated according "to their Qualities and Conditions."4 The fixing by disinterested parties of the amount which shall change hands was customary among the Natal Kaffirs too.⁵ The natives themselves scorn the idea of selling their daughters; thus the Basuto indignantly denied the imputation to Casalis, without, however, convincing him. Among the Boloki of the Upper Congo the bride's parents present the bridegroom at the wedding with food and sugar-cane wine, as "a proof that the girl is not sold as a slave, but given in marriage as a free woman."7 Among the Warega the husband never acquires more than a very limited authority over his wife, who remains a dependant of her parents and can be recalled by them whenever they choose to do so.8 Even among Mr. Bryant's own Amazulu the father remains always the wife's refuge and, in certain tribes at any rate, he never loses control over her, even after she is married.9 Paradoxical as it may seem, it is just in the marriages where no "bride-price" is paid that we meet with the most binding unions; this is the case with the bwinga form of marriage of the Awemba, when the girl is irrevocably handed over to the husband without any money passing between the bridegroom's and the bride's clans, whereas the woman for whom mpango has been paid can be reclaimed by her parents at any time. 10 The sacred chieftainess of the Bakongo for whom no nzimbu zi longo (legitimate wedlock money) has been paid, can never leave her husband and cannot even marry again should she be left a widow.11 It is thus absurd to speak of "bride-price"; nor is it more reasonable to use the words "dower" or "dowry." Something resembling dower is found in certain tribes. The Chaga father gives his daughter, according to his means, hoes or cattle after her circumcision, and these she takes with her when she gets married;12 and in Bangwe rich people furnish the bride with stock.13 The term "marriage settlement" as a substitute for "bride-price" is also out of place, as it must be restricted to real settlements found among certain peoples. Among the Bamangwate a wealthy man settles on his newly-wedded wife several small and large domestic animals which, by their natural increase, will assure her livelihood should she become a widow.14 Some eighty years ago, it was the custom that when a Kaffir took his first wife, all the cows he possessed became her property; she alone could dispose of them and their produce, and her rights passed on to her son.15 Among the Wachaga each "house" (i.e., wife and her children) is provided in the husband's lifetime with cattle and other property.16

It is of more than academic importance that a better word should be substituted for the traditional "bride-price"; Pagett, M.P., has been lately vigorously on the war-path and has acquainted us with the fantastic conclusions of slavery and traffic in daughters, he has drawn, thanks to this unfortunate word, from his superficial observations during his flying visits to Africa. After all, he is the man who will make the laws for the colonies, and ought not to be mislead. In search for the right expression, I looked for guidance, as I usually do in worldly matters, to the Rev. E. W. Smith, but found that he had shirked the question; he simply suggests the use of the native term 17 So does Captain Rattray in his admirable "Ashanti Law and Constitution." This expedient becomes impossible when several tribes have to be dealt with, for who shall decide whether chiko, lobolo, bogadi, ngosa, mpango, aseda, or any other word is to be preferred? Besides, excellent as they are, they convey nothing to the ordinary man. Mr. Smith defines chiko " as a " compensation to the girl's clan, a return to parents and guardians for the expense "they have incurred in her rearing, the seal of a contract by which she is to " become the mother of the man's children, and a guarantee for good treatment." 18

We may disregard the loss to the clan; as a rule a woman does not sever her connection with it on marriage, and frequently her children return to her own people. Nor are the expenses of rearing a child serious enough to be taken into account; in the early years there is no clothing, and later very little indeed; besides "girls are early made to help their mothers in looking after the baby and other domestic duties," such as fetching water and firewood, etc. 19 In fact, they earn their keep. It is the sealing of the contract which is of paramount importance. It is a ceremonial act by which the two groups, families or clans, pledge themselves that their children shall fulfil their duties as husband and wife. If one of the parties withdraws, it may lead to a law suit20, but as a rule, if the wife refuses to follow her husband, matters are peaceably settled by returning the goods;21 if the bridegroom defaults, they are forfeited.21 If the Kamba wife dies while still under her father's roof, the suitor is entitled to claim her sister in her place; but if the man has taken his wife home and she then dies, he has no claim to compensation, the bride having fulfilled her share of the contract.22 Of course, in the first case the restitution of the goods will be usually accepted, but there are tribes where this is not so. In former times an Ashanti deceased wife's sister, even if married, might be obliged to divorce her husband so as to take her deceased sister's place.23

The word used by the Ashanti for what is usually called "bride-price," i.e., aseda, gives apparently the character of the transaction better than any other. Marriage is concluded by the "giving and acceptance of aseda by the contracting parties." "Aseda is a thankoffering given to the person or persons from whom "some gift or benefit has been received . . . to serve as a record for all concerned that such a gift or benefit has been conferred and accepted." It is binding on both parties, "it is to ensure having witnesses." For this reason it is widely distributed and a portion of it "is given to the spirit ancestors who thus become witnesses along with the living to the contract." 24

The importance attached to witnesses is very widely spread. The *chiko* of the Ba-Ila " is contributed by the bridegroom's clansmen on the one hand . . . " on the other, it is distributed among the bride's clansmen, the parents, especially " the father, getting little of it." Among the Bechuana the cattle is taken from the common family stock and is added to the bride's common family stock. 26 The "dower" of a Swahili girl is divided between the father, uncles and aunts; other members of the family also receive a trifling share. Among the Bakongo it is divided among uncle, father, mother and brothers of the bride. "It is "always paid in the presence of witnesses. If the marriage is broken (by death) "or dissolved (by divorce), the same witnesses are present at the palaver." At a Thonga wedding the ancestors are invoked. 30

It is, of course, scarcely possible to find an English word which will convey the meaning of every native expression translated as "bride-price"; but it would be difficult to find one which is more inadequate and mischievous. Tentatively, I should like to suggest the word "earnest." According to the "Encyclopædia Britannica," "it is almost similar to the arrha of the Roman law, which may be "traced back in the history of legal institutions to a period when the validity of a contract depended not so much upon the real intention of the parties, as "upon the due observance of a prescribed ceremony. . . . But earnest was never a part payment, which arrha might have been. . . . Any sum, however small, would be sufficient as earnest, being given as a token that the contract is binding and should be expressly stated so by the giver."

These lines are not written to impose a pet word of mine, but in the hope

that criticism may produce a better one.

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Casalis, "The Basuto," p. 182.
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⁸ Delhaise, "Les Warega," p. 159.

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10 Gouldsbury and Sheane, "The Great Plateau of N. Rhodesia," p. 165 et seq.

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Dundas, "Kilimandjaro," p. 231.
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14 Holub, "Sieben Jahre in Süd Afrika," I., p. 478.

15 Shooter, "The Kaffirs of Natal and Zulu Country," p. 15.

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17 Smith and Dale, "Ila-speaking Peoples," II., p. 49.

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 Gutmann, "Das Recht der Dschagga," p. 126 et seq.

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Anthropology, Physical.

Davies.

Man's Nasal Index in Relation to Climate. By Arthur Davies. I. INTRODUCTION.

For the purpose of distinguishing between various races certain physical characteristics are used as criteria. Most of these are specialisations of particular organs under environmental control for a considerable period, and once an organ becomes specialised it tends to remain so, i.e., it does not evolve backward toward the unspecialised condition. It is essential to select as distinguishing criteria only those physical characteristics which persist in the race and are not subject to rapid alteration under influence of a change in environment. In this connection the nasal index, which approximately represents the ratio of the breadth of the nasal aperture to its height, has of late been regarded with some doubt because it appears to bear a marked relation to climate, broad noses everywhere being associated with hot moist climates and narrow noses with cool dry conditions. This relation of nasal index to climate needs investigation if it is still to be granted its former significance as an ethnic distinction.

In the J.R.A.I. for 1923, Professor Thompson and Mr. Buxton gave the results of their investigation into the correlation between Man's Nasal Index and This correlation was amply demonstrated. Following up their work, an investigation was made with special reference to Africa, with a view to examining the factors of climatic control on individual tribes and to obtain clearer ideas on the admissability of the nasal index as an ethnic distinction. In all, 220 tribes were considered. Temperatures and relative humidities were obtained and the product-movement method of correlation used. The conclusions arrived at in the correlation for Africa were applied to examples in Asia and Europe.

II. Conclusions of Article in "Journ. R. Anthrop. Inst.," Vol. LIII, 1923, P. 92 AND COMMENTS.

Professor Thompson's and Mr. Buxton's conclusions as to the correlation of nasal index and climate are clear and definite. They showed for the Old World that average climatic conditions correlates with nasal index to the extent of a correlation coefficient of .721 where 1 is perfect correlation. If the population of the Old World had been shuffled about and mixed up on a huge scale within the past 2,000 years, it might well be argued that this demonstrated correlation with climate wipes out the racial persistence of the nasal index and so impairs its value as a criterion of race. The actual recent movement, however, in the populations investigated in Africa, India, and S.E. Asia is comparatively small. Where recent movement is evidenced, as in the case of the Jews and some Tartars, the correspondence between nasal index and climate is far from marked. Without further knowledge of the time taken for the nasal index to be adjusted to climate, no definite conclusion can be reached as to the persistence of this characteristic. In their summing up, Messrs. Thompson and Buxton draw attention only to the correlation without comment on the significance of the nasal index as a criterion of race.

The fact that climate correlates with nasal index in itself merely demonstrates that climate is responsible for making the nasal aperture broad in hot regions, a control that has long been suspected: it is not a proof that the nasal index is no longer of use to distinguish between races. It remains to prove that climate continues to alter the nasal index, to make it narrower under colder conditions and broader under warmer conditions. And also that this change takes place in a relatively short time. This implies a detailed investigation into the influence of climate on individual tribes.

III. RECONSTRUCTION FORMULE.

Before any attempt can be made to investigate control of climate, a reconstruction formulæ must be obtained whereby it is possible to calculate accurately for individual tribes the climatic index, i.e., that value of the nasal index which local climate would determine. The reconstruction formulæ of Mr. Buxton confirm the correlation of climate, but are not accurate enough for individual application in every case. Actual nasal indices range from 55 to 110: these formulæ give climatic indices from 63 to 87. The calculated indices are too high for narrow noses and too low for broad ones. Evidently not enough allowance has been made for the effect of climate in hot regions and too much in cooler regions. This may be due to taking average climatic conditions as the climatic standard. To test this maximum conditions were tried in the formulæ, but the calculated indices are still too low, the actual index of 110 being calculated as 90. The other possibilities of error are in the regression coefficients of the formulæ used, which was nasal index = Temp. $\times \cdot 46 + \text{Rel. Humidity} \times \cdot 22 + 24 \cdot 9$.

The coefficients ·46 and ·22 may be increased and the constant decreased. Nevertheless, when these coefficients of regression for temperature and humidity are increased to the optimum constant value, the formula is still unsatisfactory for the hottest and for the coldest regions, 110-93. The remaining possibility of correction is that the regression coefficients are not constant, but increase

steadily with temperature and with relative humidity.

Regard it from another viewpoint. The regression coefficient for temperature was calculated by correlating temperature with nasal index and multiplying the correlation coefficient by a constant. Since all values of temperature were correlated with all values of nasal index in one correlation, there could obviously be only one correlation coefficient, and hence a constant regression coefficient. substituted in the reconstruction formula, gives accurate results only for average

values of nasal index 68-84. Suppose temperature and nasal index be correlated in sections so as to discover if the correlation is more marked for higher values of temperature. Omitting details, the results of this sectional correlation for Africa showed that higher temperatures had a higher degree of correlation, the lowest degree of correlation being associated with lowest temperatures. Similar results were obtained in a sectional correlation between nasal index and relative humidity, the correlation being less marked and the variation in value of the regression coefficient being less rapid than in the case of temperature. This brings out the fact that temperature is a stronger influence than humidity in hot regions. From these results coefficients of regression were calculated which increased steadily with temperature and with humidity. Whereas the constant coefficient for temperature in Mr. Buxton's formula was ·46, the variable coefficient ranged from ·57 at 93° to ·33 at 75°. Four such values were plotted to form the graph of the temperature coefficient of regression: similarly for humidity. From these graphs the necessary coefficients can be substituted in the new formula nasal index = Temp. \times CT + Rel. Hum. \times C_H + 38. This formula when applied to Africa, and to European and Asiatic examples, gives suitable results for the entire range of indices. Using the selected climatic standards, man's nasal index in Africa correlated with climate to a coefficient of .82, thus confirming the work of Professor Thompson and Mr. Buxton. The main value of this formula, however, is in the possibility of applying it to individual tribes with considerable chances of accurately determining the actual indices. The following test cases demonstrate this point :-Climatic Index.

						_	-
Tribe.				1	Actual Nasal Index.	Constant Coefficient.	Variable Coefficient.
Bambute (Congo)	-	-	100	-	110	95	112
Fertitawi (Sudan)	-	-	-	-	103	87	103
Battaks (Sumatra)	-	-	-	-	91	85	91
Ouled Said (Tunis)		-	-	-	64	76	63
In these cases mavi	120.11202	A.z					

In these cases maximum temperature and humidity have been used for the two highest indices and average conditions for the others. This leads to a discussion of the most suitable climatic standards to be adopted.

IV. CLIMATIC STANDARDS.

Professor Thompson and Mr. Buxton used average climatic conditions throughout the world. They were found unsatisfactory for the hottest and moistest regions, and for extreme climates in the interior of continents. Fifty per cent. of the examples were accurate for cool moist climates, 25–30 per cent. for hot climates, and 23 per cent. for extreme climates. In the investigation for Africa, maximum conditions (mean temperature and humidity for the typical summer month) gave 75 per cent. accurate; average conditions in the temperate climate of Algeria and coastal Tunis gave 80 per cent. accurate. These standards were tested to find the most suitable in examples from Asia also. It is of interest to note that in the case of extreme climates, minimum conditions are in no case an acceptable climatic standard. For Siberia, Arizona and Turkestan the following results are significant:—

Climatic Index.

									_	
		Tribe.					Na	Actual sal Index.	Average Conditions.	Maximum Conditions.
Altai Tart	ars	-	-		-			74	61	73
Arizona	-	-	-		-			78	66	84
Turkestan	-			-		-		78	65	82
					I	10	7			

Minimum conditions are quite useless. Average conditions are based partly on minimum conditions which for temperatures below 40° do not affect the nasal index, and so average conditions are unsatisfactory. A climatic standard based on the mean of monthly temperatures over 40° might be the most suitable. This has not yet been tested, however.

Summing up the evidence on climatic standards: For hot moist regions it appears maximum conditions are the chief control, and therefore the most reliable standard. For temperate and equable climates average conditions prove more satisfactory. For regions of extreme climates some standard between average conditions and maximum conditions seems to be in control.

What does this mean? Heat increases the width of the nasal aperture, and this operates without restraint to the highest temperatures experienced. On the other hand, the nasal index does not correspond with climate for low temperatures; once temperature passes below 60°, further narrowing of the nasal aperture is limited and ceases when temperature falls below 40°.

The nasal aperture adjusts readily to withstand conditions producing heat, but not to cold conditions. The same is true to a lesser degree of humidity conditions.

V. EFFECT OF CLIMATE ON THE NASAL ORGAN.

So far use has been made of mathematical evidence to try to find the factors of climatic control of the nasal organ. How do these conclusions conform with the physiological aspect? It was found:—-

- (1) Regression coefficients increased steadily with temperature and humidity.
- (2) Correlation between nasal index and temperature is highest in hottest regions.
- (3) Maximum conditions are the best standard in hot areas; mean conditions in temperate climates; minimum conditions of a dry cold nature, whether regional as in Greenland or seasonal as in Central Siberia, have little effect on the nasal aperture.

The functions of the nasal organ include (1) the admission of air to the lungs in sufficient quantity, and (2) the adjustment of this air to a temperature and a humidity suited to the lung tissue. Of these two functions, it is the second that is chiefly influenced by climate. The efficiency of the nose in its first function to admit air is not impaired by increased width and larger aperture (though it may result in slower breathing), and so it can freely keep on widening with increased temperature and humidity. On the other hand, the narrowing of the nose with lower temperatures and humidities results in the nasal aperture rapidly decreasing in volume. The lungs, however, must have sufficient air irrespective of the capacity of the nose to warm and moisten it, and so the narrowing of the nose is limited by this first function of the nasal organ. When the air is too cold and dry for the lungs, the nasal aperture adjusts to climate only to a certain stage; beyond that, colder conditions result in modification of other organs of the body, e.g., changes in character of the skin and hair. Also, artificial aids are used—as, for instance, the wearing of furs over the face to form an outer warming chamber. When a body has to adjust to a hot climate, devices for cooling are neither so numerous nor so effective as devices for conserving heat, and so the widening of the nasal aperture and the consequent increase of the nasal index is pushed to the limit of efficiency. Thus the regression coefficients rapidly decrease, the climatic correlation is less marked, and minimum climatic conditions are of no use as an effective climatic standard.

Once the nasal aperture reaches its limit of narrowing, it is possible that further adjustment to climate may proceed in the lengthening of the nose and in the developing of unusual shape.

One point of considerable importance emerges from this argument: the broad nose is a highly specialised organ; the narrow nose is much less specialised since the adaptation to environment has in the main taken place in other organs.

VI. APPLICATION TO INDIVIDUAL TRIBES.

Using the reconstruction formula previously obtained and the climatic standards discussed, the control of climate may be investigated in the case of particular tribes. For any tribe the present climatic index can be calculated; also, if its former home be known, the original climatic index, which it possessed when it entered its present region, can be calculated. (It is probable, from an inspection of correlation coefficients, that this method of arriving at the original nasal index is more accurate than the use of cranial data.) Lastly, provided there is sufficient historical data, the period during which the present climate has been in control may be determined. It remains to select only those tribal migrations on a large scale which have been free from intermixture with other tribes and of whose migration the details are fairly reliable. Dr. Haddon's "Races of Mankind" and "Wanderings of Peoples" are the sources used.

(I.) THE NARROWING OF ALREADY BROAD NOSES.

Seventeen cases have been examined of tribes whose nasal index is at least 10 units above the climatic index for their locality, and where intermixture on the whole has been slight. Each has been in its present area from 4,000 to 15,000 years, i.e., sufficiently long to have appreciably adjusted to climate. The original nasal index has been calculated for each. Of these examples, 14 show no evidence whatsoever of having narrowed from their original type. Three cases appear to have narrowed about 4 units in 6,000 to 8,000 years. This narrowing could easily be explained by intermixture with surrounding tribes. The weight of evidence is heavily in favour of the supposition that broad noses do not narrow under colder and drier conditions. It would be an interesting side-issue to follow from this conclusion to the reconstruction of the climates of byegone days which produced the broad noses of certain races.

(II.) THE WIDENING OF NOSES.

In this connection instances are numerous of the nasal index increasing when exposed to warmer and moister conditions. Eight cases are considered which fulfil the requirements as to migration details; two are from Africa and six from Asia. In every case the nasal index has increased from its original calculated nasal index. The rate of change has been determined in the eight cases. The time taken to increase by one unit is as follows: 350 years, 600, 650, 400, 450, 450, 420. These results are reasonably constant, and show an average increase of one unit in approximately 500 years.

The definitely broad nose does not narrow in response to climate, but the lower limit of the broad nose in this connection is not yet determined. Medium noses may narrow, as is shown by 14 cases from Western Europe. In all these cases the actual indices correspond closely with the calculated, indicating that

adjustment does take place in medium and narrow noses.

The conclusion is reached that the narrow nose adjusts steadily to hotter and moister conditions, but the broad nose does not narrow in response to cooler and drier conditions. The previous section arrived at the conclusion that the broad nose is a specialisation to a far greater extent than the narrow nose. Combining the two, it seems that the specialisation tends to persist, in the nasal organ as in other organs, while the non-specialised organ adapts to environmental control.

These conclusions suggest that whereas the broad-mosed races may have originated from narrow-nosed types as a result of climate, the contrary at any rate does not obtain. The broad nose of the human race which is a result of climate does not narrow.

Yet it is suspected that man has a narrower nose than his ancestor. It has not narrowed as a result of climate: it may be found that this change in the nasal aperture is associated with diminution of jaws, growth of forehead, and other structural modifications.

VII. SIGNIFICANCE OF THE NASAL INDEX AS AN ETHNIC DISTINCTION.

The broad nose is a specialisation that persists. The narrow and medium nose adapts to a change of climate at the rate of one unit in 500 years. Within 2,000 years it will differ appreciably from that of its racial and original stock, and serves only to distinguish between two tribes in the same locality. Eventually even this minor distinction is lost.

The broad nose, where it exceeds its climatic index, is a positive evidence of racial relationship; the narrow nose, except for recent migrations, can serve only to distinguish between two tribes in the same area. If its rate of change be taken into consideration, it may be of value as a confirmation of relationship. In no case can it be regarded as a reliable ethnological criterion unless it is considered in relation to the climate where it is found.

Adjustment of Medium and Narrow Noses.

				31	Actual asal Index.	Climatic Index.
4.	Are	a.		ZV	and the second s	
Mont de Mars	on		-		70	67
Landes (France	ee)				70	70.7
Sarlat (Dordo	gne)				69.8	68 · 2
Paris					69 - 1	69
La Gironde					69	70
Italian soldier	8 -				68.5	68
Soule (France)	-				69	70
Brussels -					68	69
Basses Pyréné	es				68	66.5
Bretons -	-				67.5	69
Venetians -					67	69
Auvergne -	-				67	69
S. France -		-	-		65.7	65
Tirolese -					63	64

Narrowing of already Broad Noses.

		-		 of aireaug 1	Climatic	Actual	Original
T	ribe.			Date.	Index.	Index.	Climatic Index.
Samoyedes -				5000 в.с.	69	77	78
Kamchatka				5000 B.C.	69	77	78
Chukchi -				5000 в.с.	67	79	79
Australian -				13000 в.с.	80	94	96
Tasmanian -				18000 B.C.	77	98	98
Ulu Ayar (Born	ieo)			12000 B.C.	87	91	96
Murat (Sarawak				1000 B.C.	87	99	96
Bushmen -			-	10000 B.C.	82	94	. 95
Hottentots -		-		3000 в.с.	83	92	95
Munda (Chota	Naon	ur)		1500 B.C.	84	91	92
Semang (Sumat		-		12000 в.с.	89	97	96
9							

Narrowing of already Broad Noses-cont.

	71 cc. 5	O. CO. S. LE	9 43	mer coming arrow	IN ELDOOD O	- was ve	
Tribe.					Climatic Index.	Actual Index.	Original Climatic Index.
Lissu (Yunnan) -			-	2000 в.с.	70	86	90
Lolo (Szechwan)				2000 в.с.	72	87	90
Miaotse (Kwangsi)				2000 в.с.	84	89	90
Formosans				2000 в.с.	78	95	90
Mande (Assam) -	-	-		2000 в.с.	85	94	90
Kachin (N. Burma)		-		2000 в.с.	87	90	90
			Wi	dening of N	oses.		
Oraon (Chota Nagpur)			200 A.D.	83	85	78
Rajput (Kashmir)	-			1700 B.C.	72	72	65
Gujar ,,				450 A.D.	72	67	65
Bebhan (Bihar) -				1400 B.C.	83	74	65
Kanets of Kulu Valle	ey			1700 B.C.	74	73	65
Kababish (Sudan)	-		-	900 A.D.	79	71	69
Beni Amer (Sudan)	-			900 A.D.	79	71	69
Rajputs (Rajputana)		-		1700 B.C.	79	74	65
						ART	HUR DAVIES.

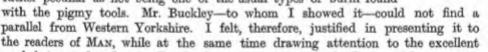
Britain: France: Archæology.

Burkitt.

Archæological Notes. By M. C. Burkitt.

The Cleveland Hills.—May I draw the attention of the readers of Man to the archæological investigations in the Cleveland Hills (Yorkshire) which are being carried out by the Curator of the Dorman Museum, Middlesbrough. Not only has Mr. Elgee been finding Bronze Age villages and burial-grounds on the moors, but pigmy industries are being collected at a number of sites. When studying these latter with Mr. Elgee at Middlesbrough, I was not able to distinguish the two series so clearly demonstrated in West Yorkshire by Mr. Buckley, but the Cleveland examples fall into line with many other sites in Eastern England

where pigmy tools have been found. The industries occur on the surface of what seem to have been settlement sites. One of these is above Commondale and occurs on the end of a low spur near the top of the ridge towards Lockwood Beck. I collected flakes and small blunted backs over an area of at least 25 yards square. I fancy some small scrapers and cores have also been found at this site, though personally I had no luck in finding them. The micrograver has yet to be discovered, but doubtless, as at Peacehaven, it will eventually turn up. At the other end of Commondale near Sleddale Beck, Mr. Elgee discovered an interesting burin (fig. 1). It is of the ordinary variety and has been resharpened in prehistoric times; it has also been fired, though probably only by moor fires due to natural causes or the burning of the heather. This burin is rather peculiar as not being one of the usual types of burin found



work being undertaken in Cleveland in connection with the Dorman Museum.

Engraved Signs on the Monuments of Brittany.—Last year there was published by Monsieur and Madame Saint-Just Péquart in conjunction with Monsieur Le Rousic—the Curator of the Museum at Carnac—a work entitled "Corpus des

Signes gravées des Monuments mégalithiques du Morbihan." I do not remember to have seen it much reviewed in this country, although, having spent much of last year in S. Africa, I may have missed one or two notices. There are about 100 pages of text analysing and describing the various signs engraved on the Monuments, but undoubtedly the most important section of the work is the series of 138 full-page plates, the result in most cases of beautifully taken photographs. The authors are to be congratulated on producing a work which will long be indispensable to all students of Neolithic or earliest Metal Age art.

M. C. BURKITT.

REVIEWS.

Archæology. de Morgan.

La Préhistoire Orientale. Vol. I.

Généralités ; Vol. II. L'Egypte et

Generalités; Vol. II. L'Egypte et l'Afrique du Nord; Vol. III. L'Asie Antérieure. Par Jacques de Morgan. Ouvrage posthume publié par Louis Germain. Paris: Geuthner. 1925, 1926, 1927. Pp. 332, 421, 396. Price 300 fcs.

This is, in a sense, the archæological testament of its distinguished author. After forty years of almost incessant travel, excavation, and administration of antiquities, in India in 1883, in Egypt as Maspéro's successor, in the Caucasus and Armenia, Syria, Mesopotamia, and Persia, he had a few years of comparative leisure, but broken health, in which to set his notes and unpublished materials in order. The end came before the book, which he considered to be his masterpiece, was published; but it was practically ready, and his friend the editor has not had much difficulty in supplying a few obvious omissions. Twice before, de Morgan had attempted something of the same kind: in his Premières Civilisations of 1909, and his Humanité Préhistorique of 1921; the latter was translated into English in 1924 (Kegan Paul). Readers of those two books will know what to expect in La Préhistoire Orientale: an immense range of detailed knowledge, the "geographical thinking" of a traveller and man of the world, a fertile and resourceful imagination, and a born organiser's skill in combining the most disparate information in to a living picture of regions and civilisations. And, like many persons of strong character and practical ability, de Morgan had an outfit of deep-seated principles, almost of beliefs, cherished tenaciously, and always liable to emerge and dominate his outlook, when the discoveries of others, and even his own results, might well have challenged revision. It is this aspect of him which gives a pathetic interest to his "masterpiece": it might convince people after he was gone.

For example, in Vol. I his conviction of the necessary connection between the processes which made Europe and the Mediterranean and the Near East as we

know them, and the first efforts of nascent humanity (ch. i to iv) competes in significance with his other belief (based on his own studies of the surface geology of Mesopotamia and its upland neighbours) in a crisis of pluvial inundation partly the counterpart of the glacial crisis of the North West, partly its immediate sequel, and of a wholesale depopulation of the Nearer East which had the effect of giving mankind a new start at the beginning of the modern age (ch. v-viii). This explains his recourse to the regional culture of so remote a backwater as Kamschatka, to fill out our archæological reconstruction of Magdalenian life (ch. ix), and of other distant peoples to illustrate the development of stone-working (ch. x). Similarly ch. x is a vigorous and ingenious protest against theories of "contamination" and "diffusion" which a man who had handled so many original pieces of early craftsmanship could hardly be expected to tolerate, even if he had not also travelled as widely as de Morgan, and seen people of backward culture at their work. Good instances of his argument are the sections on New World pottery, metallurgy, and systems of writing. To the last topic de Morgan returns at greater length in the last chapter of Vol. III. Conversely, he gives much weight to the consideration that the last thing that usually occurs to uncivilised people is that their neighbours have any notions worth "diffusing." The difficulties of an oversea missionary, even more obviously, are only begun when he has effected a landing. Another opinion, strongly held and defended in ch. xii, concerns the reconstruction of Egyptian chronology, on which de Morgan differed fundamentally from most of his contemporaries: a point which has to be kept in mind in making use of Vol. II.

This second volume summarises and supplements the contents of the author's earlier book Les Premières Civilisations; and discusses in detail the probability that the Dynastic culture of Egypt is of foreign, and (as he believes) of "Chaldean," origin. Supplementary chapters deal with the "Capsian" culture in Tunisia, and the

palseolithic finds from Somaliland. The rarity of Upper Palseolithic and Neolithic objects from the latter region is emphasised, as precluding the notion that the Nile Valley received any part of its early culture from this side.

The third volume is in many ways the most interesting, for it deals with the results of the long series of journeys and excavations in Persia, Armenia, and the Caucasus, which reshaped archæological science in Western Asia, but have been now for the first time brought into systematic relations with each other. Principal topics are, of course, the civilisations revealed at Susa and neighbouring sites; the primitive exploitation of the new-made alluvium of the Tigris-Euphrates delta, which owes so much to that of Susa; the stone age cultures of Further Asia, which are shown to be without influence on those of the Nearer East; and the early traces of copper, and also of iron, which are shown to point to probable origins for copper-working in the highland region which extends from Armenia to the coast east of the Persian Gulf; and for iron working in Western Armenia or Eastern Asia Minor. European ironworking is attributed to transmission from Transcaucasia to Indo-Europeanspeaking peoples moving westwards along a route north of the Caspian and Black Sea.

It will be obvious from this that de Morgan's preoccupation with the Nearer East prevented him from keeping abreast of either the philological or the archæological work of the last generation in regard to European problems. Even the Ægean cultures, to which a few pages only are given, were admittedly outside his special knowledge; and his interpretation of the most valuable of his own discoveries in the Caucasus and neighbouring regions must be estimated with this deficiency in view.

A final chapter on the origin of writing reiterates the arguments against any single source for the scripts of the Near East, the Far East, and the New World; but contemplates in regard to the Near East a single very remote discovery, the legacy of which took, in different regions, the diverse forms and applications which are the earliest scripts known to us.

Like all de Morgan's work, these last volumes owe much of their interest to the numerous sketches and diagrams which it was evidently one of his recreations to produce for himself. And there is a good index at the end of Vol. III.

J. L. MYRES.

Europe: Archæology. Castillo.

La Cultura del Vaso campaniforme: su Origen y Extensión en 7

Europa. Por Alberto del Castillo Yurrita. Barcelona, 1928. Pp. 216; 206 plates

and 2 maps.

Professor Castillo has done us good service in writing this fine book. "beaker" fashion in pottery that spread so suddenly over a large area of Europe in the third millennium B.C. is a curious and important phenomenon in prehistory, and its study, involving as it does most difficult and delicate diagnoses of migrations, trade-enterprise, and mere culturecontact, is no light undertaking. Extensive travel, hard work in many museums, diligent reading, and the constant exercise of a sound and never-ruffled judgment, are all demanded of the author of a book on this subject, and Professor Castillo, though modestly protesting that the volume before us contains an "infinity of imperfections," has risen nobly to the task. Here are 206 plates of photographs and drawings, 2 maps, and 214 crown quarto pages of a restrained and always lucid commentary, an admirable text not overloaded with all the tedious minutiæ of the relevant information, nor embarrassed by a too heavy apparatus of references and notes.

At the beginning of the book the ground is quickly cleared. There are, indeed, a few pages devoted to the various and rival theories as to the origin of the beaker, but Professor Castillo hurries through the list of these in order to state with the least possible delay his full acceptance of the theory of an Iberian origin as first propounded by Schmidt and afterwards endorsed and amplified by Professor Bosch Gimpera. The valley of the Guadalquivir is the original home of the beaker, and here it is that Castillo's quest begins. Such summary treatment of a big problem may be fairly excused on the grounds that the author has already dealt in full detail with this very subject in his Céramica incisa; while as for his often-stated faith in the writings of Schmidt and Bosch, at least he does not follow Bosch without discrimination, abandoning, as we shall see, one of the positions defended by this ingenious and learned author in his now famous article "Glochenbecherkultur" (Ebert's Reallexikon).

Starting, then, with a preliminary survey of the four great culture-groups of the peninsula in the neolithic and chalcolithic periods, and noticing the origin of beaker-ornament and ornament-technique, and even the prototypes of the beaker shape, in the Central or "Cave" province (as in the Cueva de la Mujer, Granada, or Pileta, Málaga, and in the Gibraltar caves), Professor Castillo

proceeds to apportion his material within the peninsula into nine inter-related beakergroups. Of these the richest of all is the Guadalquivir valley in Andalucía, a district that owes much of its importance as the first home of the beaker-culture to the researches of Mr. George Bonsor. For he it was who brought to light the great potteryseries from Carmona and the habitationsites of Acebuchal, and the megaliths of the neighbourhood, that outshone even the fine wares of Ciempozuelos, and first directed the attention of archeologists to the south. Three other, though less brilliant, groups must be included in the "homeland" of the beaker. These are the Lower Plateau, or Toledo, group (wherein is the famous necropolis of Ciempozuelos that was for so long the "type-station" for beakers), the Upper Plateau group, and the Soria, or Numancia, group. But Portugal, as represented typically by the Palmella grottoes, the Almeria group, as represented typically at Los Millares, the Tarragona group, the Pyrenean group, and the poorly represented Galician group, are all situate in independent beaker-provinces, derived indeed from the Central and Southern "Cave Area," but not originally an integral part of this. In other words, during the chalcolithic period there took place a curious unification of cultures that in neolithic times were sharply distinct, this unification being achieved by the transfusion from the "Cave Area"—that is to say, the approximate territory of the four groups first named-of the beakerculture, though this beaker-culture itself underwent, as is natural, certain alterations in its new surroundings. To what, then, are we to ascribe this sudden spread of the beaker-fashion outside its homeland? Professor Castillo's answer is that the diffusion of the beaker-culture is directly due to the newly arisen copper-trade. For the time was one of great cultural activity, especially along the routes between the beaker-land on the Guadalquivir and the Huelva copper-mines, and between this same Guadalquivir region and the rich pioneer copper-workers of Almería.

The material outside Spain and Portugal is easily divided into two main sections, the first comprising the beaker-cultures that are directly derived from those of the Iberian peninsula, and the second being reserved for those that are only indirectly connected with Spain and Portugal. In the first section, the survey begins in the South of France where we have plainly an extension of the Pyrenean megalithic culture, though the beakers here, as for instance at La Halliarde; have, in Professor Castillo's experienced eye, a provincial and almost degenerate look, suggesting to him

that they mark the end of this direct progress of the beaker-fashion eastwards, and not merely a stage in a movement towards the Alplands and the Rhine. Brittany has another beaker-culture that is entirely distinct and believed to have been derived from Portugal by the medium of an oversea trade. And beyond Brittany is Ireland (but strangely out of place in the author's otherwise well-ordered work) where the Moytirra sherds, now finely published, are witness to the same Atlantic trade. In the Mediterranean islands and in Italy we have another area of expansion of the Iberian beaker, and this is to be explained as the result of the further search for copper. Although in the Balearies there is only a single beakersherd, and a dubious one at that, in the rich land of metal, Sardinia, there was a flourishing beaker-culture that was derived from Almería. The Sicilian beaker-culture is thought to have been derived from that of Sardinia and is declared to be of high importance inasmuch as it is associated with a painted pottery of Central European origin, this giving a confirmation of the Iberian chronological system, since the painted pottery is judged to be earlier than Siculan I. In North-east Italy there are beaker-sherds in the Tuscan Cave-Culture. There is also a further apparition of the Iberian beaker-culture at Remedello and other sites in North Italy, derived, Professor Castillo believes, rather from Sardinia and Tuscany than from the South of France.

In the Central European and Rhineland groups, as also in Holland and Great Britain, the beaker-culture, while ultimately of Iberian origin, is the result of a borrowing at second hand and is revealed as one that is profoundly altered by the fashions and tastes of another civilisation. Professor Castillo's survey begins in the Munich neighbourhood, where the beakers are found in company with a "proto-Aunjetitz" culture; but in East Central Europe the principal beaker-territory lies in Bohemia and Moravia, though there is an eastward extension to Hungary and a northern one to Silesia. A rich and closely related beaker-culture is to be found in Saxony and Thuringia between the Saale and the Weser, though here there is a noticeable altering of the beaker style due to the admission of characteristically Rhenan forms. The origin of the East Central European beaker-cultures must be explained, the author suggests, as a consequence of the traffic between the copper mines of the Austrian Alps and the North Italian beaker-populations, a traffic utilising, no doubt, the valleys of the Adige and the Inn. The Rhineland group of beakers,

though allied to that of Saxony and Thuringia, has something of a Pyrenean character and must have been to no small degree affected by trade-routes leading through the South of France. But Professor Castillo does not admit this as sufficient evidence to prove that it was through the Rhineland that the beaker culture reached Central Europe. And with this denial he discovers himself in amiable conflict with his friend and colleague Bosch; for Bosch has argued that it was by way of the Rhine country that the beaker was introduced not only into Holland and Britain (as Castillo agrees), but also into Central Germany and thence into the Danube valley.

And now as to the bearers of this beakerculture. In the diffusion of the beaker throughout the Iberian peninsula and those neighbouring cultures wherein the beakerelement is thought to be derived directly from the peninsula, we are bidden to see nothing more than the ordinary consequences of the exploitation of, and search for, copper. That is to say, the original beaker-folk of Andalucía were among the richest and the most progressive of the earliest copper-users of the Western Mediterranean, and it is to their trade-enterprise that the spread of the beaker-fashion must be directly ascribed. But in Central Europe and the Rhineland there is, on the other hand, a possibility of some correlation, although at present ill-defined, between the beakers and various (not necessarily one and the same) migrating peoples. Such a folk would be the "beaker people" who, leaving the Rhine country, brought the beaker-culture to Holland and to our own shores.

The book contains many incidental observations of considerable interest, as notably the remarks on the technicalities of beaker-ornament and the discussion arising out of the frequently recorded occurrence of twisted-thread lines on this class of pottery in Brittany, the South of France, and in Spain itself. It is also worth recording that Professor Castillo attaches no importance whatever to the white inlay of which so much is heard, for this he ascribes in most instances to a

natural cause.

It would, of course, be easy to criticise a large and comprehensive work of this kind on various small matters of detail. As examples of such criticism, it may be observed that on Map I the area of Group XI should be enlarged so as to include the Channel Islands (between forty and fifty beakers have been found in these islands, but Professor Castillo has not thought them worth a mention); again, that very interesting beaker-sherd from

Bennemont, near Mantes in the Seine-et-Oise (Rouen Museum : cast at St. Germain) should have been marked on the map and mentioned in the text. If the Moytirra sherds deserve a group-number and textsection to themselves, then so does this Bennemont beaker, for it is obviously an important connecting link between Brittany and the Rhine.

As to the format of the book, many of the plates are excellent, and the volume is a pleasant one to handle; it is likewise pleasant to read, except for the fact that the type used for the foot-notes is exasperatingly and ridiculously small. As a work of reference, the value of the book is seriously lessened by the lack of an index and a list of illustrations.

T. D. KENDRICK.

Papua : Religion. Williams.

Orokaiva Magic. By F. E. Williams. With a Foreword by R. R. Marett. 9 in. × 51 in.; pp. xii. 231; 2 maps and 7 illustrations. London: Humphrey Milford, Oxford University Press. Price 12s. 6d. net.

Mr. Williams's book is a reprint of his Anthropological Reports Nos. 6, 7 and 8, to the Papuan Government, dealing, respectively, with the Taro cult, the garden culture of the Orokaiva (in the Northern Division of Papua), and Orokaiva magic.

The first of these reports is an account, largely first-hand, of the religious epidemic which, about 1911 and since, swept the Orokaiva off their feet and to some extent supplanted, and certainly extensively modified, their beliefs. It is a pity that Mr. Williams did not also republish his Report No. IV on "The Vailala Madness and the Destruction of Ceremonies in the Gulf Division," for these two epidemics present some curious and instructive contrasts. The Taro cult, dating from 1911, is still a very powerful influence; the Vailala Madness, which passed like wildfire over the coastal regions of the Gulf Division in 1919 and 1920, is now definitely on the wane. It would have been instructive to compare the two movements and the causes of their contrasting durability. The Taro cult seems to me to be most effectively interpreted as the result of an expression of unconscious revolt against the presence of the foreigner, similar to the recurring ramanenjana of Madagascar.

The second report is chiefly, though by no means entirely, of agricultural and horticultural interest. The third attempts an analysis of Orokaiva magic with the view of arriving at an adequate Government policy. A very sound and sensible survey of this ticklish problem ends with the conclusion that before the native can be converted to more reasonable beliefs he must be educated to appreciate the white man's intentions. At present it is only too true that the native "is prone to go " away thinking that the white man is a " trifle too blunt to understand the occult "influences which have so long been at " work among his people" (p. 225). The book concludes with a brief glossary and an inadequate index.

THEODORE BESTERMAN.

Malay Archipelago: Ethnography. Krämer.

Die sterbenden Inseln. Von Philipp Krämer. 8½ × 5½. Pp. 144. 40 plates. München: Georg Müller. 1928.

The islands in question are Java and Bali; and as their population, in the aggregate, has multiplied sixfold or more in the last century or so, the title must not be taken in a material sense or too tragically. What the author means is that they are changing under foreign influence; but that process, though one may regret it, is not precisely death. However, this narrative of travel by a sentimental traveller (as the author rightly styles himself) is cast into the form of a poetical and philosophical rhapsody, a genre which will not appeal to everybody, though in this case it is certainly not le genre ennuyeux. On the contrary, the book is very readable and a great deal of it is beautiful; but one is a little wearied now and then by some of the rather sententious apophthegms and prose lyrics introduced somewhat gratuitously into the text. Nevertheless, it makes on the whole a fine series of impressionist pictures, full of atmosphere and local colour.

Many of the illustrations are very good, but others suffer from being on too small a scale. C. O. BLAGDEN.

Archæology. Contenau.

Manuel d'Archéologie orientale.

I. Notions générales ; histoire de l'Art.

By Dr. G. Contenau. Pp. 545. Paris :

Editions Picard. 1927.

Readers unfamiliar with French terminology might be misled by the title of Dr. Contenau's work. No systematic account of Oriental industries is, in fact, attempted; tools and weapons (except those from Susa I) scarcely figure in the whole book. On the other hand, the author gives us the clearest account of the early settlements at Susa yet presented anywhere. He rejects Frankfort's view that Susa I was primitive and that its pottery imitates leather. He further denies (rightly in my opinion) the complete discontinuity between Susa I and II postulated by that author, though he admits (still more justly) a new element in the Second Style. Incidentally, a number of new or hardly available monuments of archaic Elamite art are here made conveniently accessible. Particularly notable is a twin cylindrical vase representing a wooden construction. These hundred pages in the second part of the book accordingly fill a real want.

They are preceded by a general survey of the sources, the geographical and racial background, and the languages and scripts current in the Ancient East. The geographical section is insufficient, failing altogether to appreciate the significance of climatic changes, and on the geological side falling far short of the standard set by Unger's short article in the Reallexikon. On the other hand, Contenau wisely denies the ethnological value of those variations in head-dress that play so large a rôle in German speculation on Babylonian origins. He is equally prudent in his use of the Anau material (none can be earlier than Susa Ibis), despite his adherence to the Central Asian hypothesis of Sumerian origins. Valuable, too, is the list of the symbols of the principal Babylonian deities.

Yet we must confess that the first part as well as the section dealing with archaic Sumer is disappointing. It gives us little that was not already available in the older standard works such as Delaport's "Mesopotamia," and falls very far short of the brilliant treatment accorded to the old and new material in Sidney Smith's "Early History of Assyria" that appeared about the same time. Our author can, of course, hardly be blamed for failing to foresee the results of the latest excavations at Ur that naturally invalidate many of his conclusions. But the paucity of references to recent Anglo-American work and the failure to appreciate the importance of al'Ubaid and Kish are not so easily excusable. A new description of the monuments from Tello and Susa is a trifle out of date when older or better material resulting from far more scientific excavations is available in such superabundance.

But doubtless in the succeeding volume treating of periods wherein discoveries are less revolutionary, Dr. Contenau's lucidity, objectivity and fine judgment will find fuller scope. Incidentally, he will have an opportunity then to remedy the defects of the first.

V. G. C.

Romania: Archæology. Pårvan.

Dacia: an Oulline of the Early
Civilisation of the CarpathoDanubian Countries. By Vasile Pårvan.
Cambridge University Press. 1928. Price
7s. 6d. Pp. x + 214 + 16 plates and map.

The late Professor Parvan, for long secretary of the Roumanian Academy, was a world-renowned classical scholar. But the ventures of such in the alien discipline of prehistory are often ill-starred. The account of the Bronze and Early Iron Ages in Professor Parvan's lectures, here posthumously published, will therefore appear as a miracle of lucidity, while his chapter on the Celtic Iron Age and the Roman period will be a revelation. It is extraordinary testimony to his genius that the author has grasped the methods of prehistoric archæology and in particular the complex Bronze Age material, described as it was mainly in Magyar, with such a complete mastery and fine appreciation. Under his touch the obscure Bronze and Early Iron Ages of Transylvania, eastern Hungary and Roumania come to life in an easily intelligible, convincing and, on the whole, accurate picture. The apparent gap in the record that makes the chronology of the Lower Danube basin in the first millenium B.C. so perplexing is convincingly explained on page 67: "The arrival of the Scythians " about 700 had disastrous consequences. . . "Their constant plunderings combined with the nomadic nature of their life " to disturb and impoverish the flourishing

brilliant is his explanation of the curiously moulded malls of the Csófalva axes by a reference to the zoomorphic forms of Persia. Altogether the Cambridge University Press is to be congratulated upon making available with such relatively abundant illustrations (which should, however, have been accompanied by indications of scale) this masterly account of an almost unknown but intensely fascinating archeological province.

But piety, as well as a consideration of the needs of classical readers as opposed to specialised prehistorians, should have ensured care in the translation. Prehistory has a well-defined terminology like other sciences—a terminology which, in French, Professor Pârvan had thoroughly mastered. Yet his posthumous translators write, e.g., "cast "for "mould," "deposit" for "hoard," and speak of "figures in ware" (meaning pottery). In fact, they have so little feeling for English that they can write "the next station which has hitherto been discovered. . . ."

The book at its moderate price should go through several editions. Is it too much to hope that, before the next one appears, the text shall have been revised by some one with at least an elementary acquaintance with archæological terminology?

V. G. CHILDE.

CORRESPONDENCE.

Mummification.

Thomas.

Mummification in Australia and America.

To the Editor of Man.

Sir,—Mr. Warren Dawson, in his valuable article under the above title (Journal R.A.I., lviii, Pt. 1, p. 115) favours the "Egyptian-Argonaut" theory of the spread of mummification, which, to use the writer's words in another connection, seems, to many students of the subject, to be "far too sweeping a generalisation" of the facts.

" agricultural economy which they had "found upon their arrival." No less

The following are some general considerations, adverse to the theory, which I have not seen advanced and therefore venture to put forward.

The belief is widespread among primitive peoples that death is a kind of sleep induced by evil magic. The inevitability of corruption after death is an idea faced by some races and avoided by others. In the latter case, the expression of affection for the dead finds fuller play through the employment of means for preserving the body.

In Egypt natural desiccation in the dry hot sand may have given a definite trend to custom and belief, but it is highly probable that methods of preserving food by desiccation, smoking, pickling and salting, and of curing hides, were known and widely used long before they were applied to preserving the human body.

These may well have been discovered independently in many different places. Methods of evisceration, similarly, for a "neat job," are limited in number and determined by the nature of the body. Some of them must have long been employed upon food-carcases, before they were adapted as operations in mummification.

Having preserved the body, it would be natural to consider means of saving the hair and nails from destruction as well as of artificially producing a semblance of life by padding, paint, false eyes, etc. And it would be surprising if there were no striking resemblances among the resultant finished articles in different parts of the world, seeing that they had primarily the same natural object in view.

The funerary use of red colour is referable to the Upper Palæolithic Age, and the germ of funerary equipment has been discovered in Mousterian burials; no connective cultural significance can therefore be deduced from these features in connection with, relatively, modern burial customs.

Maps showing the distribution of the "heliolithic" culture are apt to be deceptive; they show us regions where some or all the elements involved occur concurrently, but do not show us all the regions where some of them are existent. For example, car-piercing, sunworship and serpent cults in some form or other are surely general over the whole Continent of Africa, and not confined to the coastal regions hypothetically visited by the postulated spreaders of the heliolithic culture.

Some of the details advanced by advocates of the theory in question are striking, but not so hard to regard as coincidences as to accept as evidence of the truth of the theory which they are adduced to support.

Yours, etc.,

ERNEST S. THOMAS.

Terminology.

Radeliffe-Brown.

Age Organization—Terminology. To the Editor of Man. 19

SR,—With reference to Mr. E. C.
Baker's interesting and important paper on Age-grades in East Africa I should like to draw attention to the need of somewhat more exact terminology in the sociological description of age organizations. Two terms that are commonly used are "age-grade" and "age-class," but often no clear distinction is made between them. Thus Rivers ("Social Organization," p. 79) seems to use the two terms as alternative and equivalent or synonymous terms.

I would propose to avoid the ambiguous and otherwise objectionable "class" and use two terms "set" and "grade," defined as follows:

Age-set.—A recognised and sometimes organised group consisting of persons (often male persons only) who are of the same age. The Kimta of Bartle Bay (New Guinea) as recorded by Seligman* are age-sets including both male and female persons. In Africa, at any rate in East and South Africa, an age-set is normally formed of all those males who are initiated at one time. In South Africa the age-sets of the Zulu, Basuto, Bechuana, etc., are often spoken of as "regiments," because normally all the men of one age-set go out to battle together under a leader of their own. Once a person enters a given age-set, whether at birth or by initiation, he remains a member of the same set for the remainder of his life.

Age-grade.—This term should be kept for recognised divisions of the life of an individual as he passes from infancy to old age. Thus each person passes successively into one grade after another, and, if he live long enough, through the whole series—infant, boy, youth, young married man, elder, or whatever it may be.

The two terms "set" and "grade" are therefore quite distinct and by adopting them

* "The Melanesians of British New Guinea," p. 470, seq. and avoiding the ambiguous "class" we can get an exact terminology.

In East Africa, where the age-organization is highly elaborated, each age-set normally passes from one grade to another as a whole.

On my terminology the twelve divisions of the Waikoma enumerated by Mr. Baker, and called by him age-grades, are age-sets. There are three age-sets to a generation, and four generations constitute what may be called an age-cycle.

Among the Bakuria the saro, which Mr. Baker speaks of as "generations," are similarly agesets. The difference is that amongst the Waikoma, as amongst the Galla and Wa-Pokomo, the age-sets are organised into cycles, whereas the Bakuria system is of the more usual form such as is found in many African tribes. Mr. Baker does not mention what age-grades (in my sense of the word) are recognised in these tribes.

Yours faithfully, A. R. RADCLIFFE-BROWN.

Papua. Pitt-Rivers.
Papuan Criminals and British
Justice.

To the Editor of Man.

SIR,—Just now, when the problems of
Colonial administration and the government
of subject races are so much in the air, it
is a privilege to listen to an administrator
of the distinction and experience of Sir Hubert
Murray. His interest in anthropological investigators is well known and highly valued.

The paper he read at the Institute on December 4th on Papuan Criminals and British Justice appeared to me, however, to raise certain questions which go to the very root of the Native problem, which seemed to have been overlooked in the subsequent discussion. Sir Hubert again laid stress, as he has before, on the importance of a profound and considerate understanding of native customs, which cannot without disaster be lightly disregarded or swept aside by European officials. I think he appreciates, too, that an efficient and sympathetic understanding of native customs is not only dependent on an understanding of the native vernacular, but that the investigator and the administrator should also be capable of translating not merely the words, but the very ideas and values implicit in native thought, rooted as they are in the social background—the whole culture-complex of native life.

Since no one else raised the questions I am about to put, I am the more inclined to ask whether the Native Ordinance in Papua is in some respect not evidence of the frequent indifference of even the wisest administrator to fundamental native ideas of justice, of right and wrong, of good and bad and of the essential culture-nexus which lies behind? Good and bad, right and wrong, punishable and commendable in the Native Ordinance is nearly always the European's God-given and inflexible code, seldom the native's, with which it con

flicts. It seems likely that the ethnographer coming without ethical prejudices will discover rather more about the native good and bad during his first twenty-five days of field-work than the administrator in twenty-five years who starts, as he usually must, with a lawyertrained code of European torts and values. In Sir Hubert's territory this bias is indurated by the regulation which compels all native court cases to be tried in English, and in 1921 I was present where cases were tried in which interpreters were employed to translate every question and answer into three languages before it reached the culprit from English into Motuan, and Motuan into Mekeo. Resident magistrates are so often changed from district to district that, even if they had the training or the time, they could not be expected to learn anything of the inland dialects, let alone the customs of the tribes. During my short period of residence in the Mekeo district three A.R.M.s followed one another in succession at Kairuku. ventured to give some examples of the result in my recent book, "The Clash of Culture."

Where the conflict and incompatibility between native ideas of justice and the imposed new British dispensation seemed most conspicuous was in the departments of magic, which permeates every aspect of native life, and that of sex and marriage. Sir Hubert quoted his Native Ordinance in which it is prescribed: "Sorcery is only deceit, but the "lies of the sorcerer frighten many people; " therefore the sorcerer must be punished . and it was said that the sorcerer was held in dread and hated by his own people. In Mekeo, where particularly magic is highly institutionalised, the hereditary sorcerer (faia lopia) is looked upon as the healer and chief guardian of his clan, his evil or black magic is available only, or principally, for the enemies of his clan or the wrongdoers within it. Yet he is mercilessly persecuted by the Government, and cases are known where he has been vigorously defended against government agents by his own clansmen, when about to be arrested for having in his possession the baubles and paraphernalia of magic.

With regard to marriage customs, Sir Hubert Murray mentioned that the Government interfered with them not at all. It would be very gratifying to think that this is now so. I believe I am correct, however, in the statement that it is the professed official policy to discourage native marriages when they are polygamous, and to encourage what are officially known as legal or registered Christian marriages. But, in his book, "Papua of To-day," (p. 202), Sir Hubert accuses me of "inaccuracy" in a former statement that the Government supports the missionary war against polygamy and native marriage systems. In consequence I thought it fair to publish in "The Clash of Culture," pp. 138-141, five detailed cases where the most vindictive and penal type of interference initiated by missionaries had actually taken place in one district.

Yours faithfully, GEORGE PITT-RIVERS. Ireland: Archæology. Charlesworth and others.

Ireland in Pleistocene Times.

To the Editor of Man.

Sirk,—It is not my intention to discuss the nice debating points raised by the recent letters in Man (111, August, 1928; 124, September 1928) by Messrs. Reid Moir, Burchell and Blake Whelan, but to comment upon the one or two remarks which seem relevant to the heading of this correspondence.

It is perhaps unnecessary to point out the fallacy underlying the analogy of the obvious wheelbarrow and the disputed Sligo "implements"—which I may incidentally observe were kindly shown to me, in the company of Prof. P. F. Kendall, by Mr. Reginald Smith, as early as January last—the problematical nature of which is shown not only by their entire rejection as artifacts by some archeologists, but by the serious divergence of view as to their age, revealed in the statements of those who do believe in them. They have been assigned to the Early Mousterian by Mr. Reid Moir, to Pre-Chellean by Mr. Burchell, to a period "très reculée du paléo" lithique" by l'Abbé Breuil, who denies the Mousterian affinities stressed by Mr. Moir, and to an age unknown by a number of other writers. The divergence is further emphasised by the fact that a few "implements" accepted as human by Messrs. Moir and Burchell, were found by l'Abbé Breuil to be reconcilable with the action of natural forces.

The assumption implied in the wheelbarrow argument that the provenance of an implement is of no moment is certainly very novel and to those who make it doubtless very comforting, but it is scarcely likely to win the ready acceptance of geologists or, one hopes, of other archæologists. Yet one would like to ask, if the "workshop" be of no importance, why has all the stress been laid upon the Rosses Point site, and by what rules of discussion is the introduction of the site to be allowed to the "placets" and denied to the "non placete"?

The assertion contained in the same letter that an interglacial layer occurs at Bally-connell, Co. Sligo, has no foundation whatever in the field, as Profs. Jones and Boswell agreed, when engaged in their investigation on the spot. Attempts by non-glacialists to read into the Sligo drifts a succession comparable with that of East Anglia, uncertain as that in many respects undoubtedly is, will only confuse the issues and retard the disentanglement of the workers we all desire.

ment of the problem we all desire.

The reply to my question—which, it may be added, was not rhetorical but meant as a serious challenge—as to the whereabouts of the Irish interglacial deposits is an unnecessary discourse upon the theme of interglacial periods in Europe in general and, so far as Ireland is concerned, the inclusion of such statements as "in my own belief" a race of man occupied the limestone cliffs at Sligo towards the close of an interglacial period; "it is probable that more zealous field "work and painstaking analysis of our brickearths and peat intercalations will ultimately accomplish wonders"; and that "were an effective scientific examination of

"the Keshcorran cave deposits [which Mr. "Whelan will be interested to hear I have "also seen] made I am confident that more "than a hint at interglacial occupation would "be forthcoming." All of this may be of interest in giving Mr. Whelan's personal hopes and opinions, which being non-geological can scarcely carry any weight, but they certainly do not prove anything. We want facts, clear as to their authenticity and unmistakable in their meaning, and no substitute for these can be of use.

Since Mr. Whelan appeals to l'Abbé Breuil's letter, may I remind him of its last paragraph : "Il appartient à la géologie d'en fixer l'âge."

Yours faithfully, J. KAYE CHARLESWORTH.

SIR,-I have visited the Rosses Point sites four times, each time in the company of a geologist of position. The First, when we came on the ground, said "What is this?" "This, sir," said I, "is Mr. Burchell's 'rockshelter.'" "You are not serious?" "Quite serious; here is his own photograph of it, in his own book." "But I never realised that the case was as bad as this; this is past a joke." The Second said much the same thing, yet more emphatically. The Third, after we had seen all the sites, said, "I don't care what they have found; the geology condemns them absolutely." The Fourth, in answer to a question of mine, said that it would be quite legitimate to describe the affair as an insult to Science. Each visit occupied a whole day, during which, and during the subsequent railway-journeys back to Dublin, little else was discussed; and in all those long conversations I do not recollect a single word spoken to mitigate the universal condemnation of Messrs. Moir and Burchell's theories.

But Mr. Moir now tells us that Mr. Dixon has formed the opinion that Mr. Burchell's geological views are correct. I saw Mr. Dixon's report when it first appeared (Nature, 8th September, p. 348); I have now read it again; and can say only that if Mr. Moir accepts this as a corroborative testimony sufficient to turn the balance in his favour, he must be very easily satisfied. Mr. Dixon may be a wholehearted supporter of Messrs. Moir and Burchell; but if he wished us to understand this, he will have to express himself much more definitely. As it stands, his report very successfully conveys the impression of an advocate doing his best with a brief for which he has a very moderate enthusiasm! He allows his clients the cold comfort of one chance of success in at least a hundred, which "it would appear" has succeeded—almost inviting the retort that appearances are deceptive! He makes one very damaging admission; and he rests a certain fundamental postulate upon a theory of Mr. Burchell's, which theory Mr. Burchell has himself been obliged to confess was erroneous-so that theory, postulate, and the structure reared upon it crash to the ground together. These criticisms will be justified in good time; at present it would be premature to do so, until we see whether Mr. Dixon will be able to strengthen his advocacy. If he cannot see his way to do this, it will not be overstating the case that while the criticisms of opponents may or may not have been injurious to the cause of the Sligo "implements," the support of Mr. Dixon has been nothing short of fatal.

Mr. Moir suspects that I do not know the tests whereby he professes to distinguish human from non-human products in roughly chipped stones. I can assure him that I know far more about them than I am ever likely to require. But if anyone were to ask me whether or not I believe in them, I would now answer that inasmuch as belief seems to force a man to accept and to fight for the pieces of stone. which I saw in the British Museum, as well as the monstrous farrago of ineptitudes with which they are inextricably bound up-for a rockshelter that not only never existed, but never could have existed: for its equally mythical inhabitants, whom we must necessarily conceive of as amphibious beings about three feet in height; for tools left behind by these hobgoblins, lying where they fell, and pre-serving their shape and freshness although the Atlantic waves have been breaking over them for, let us say, 50,000 years—then I cannot be too thankful that I have never had the slightest temptation to believe in

I pass over a puerile diagnosis of "confusion of thought"; I pass over self-flattering but singularly humourless illusions that I have placed the Sligo book in the department of biblia abiblia in order "to put aside inconvenient evidence," and that my colleagues and I are in a "totally impossible position." I note that (notwithstanding the highly impressive invocation of those blessed words "thermal disruption") Mr. Moir now virtually admits that he does not know any more than I do, how the stone which I picked up was fractured. Similar admissions may be expected hereafter. I observe, with interest, that, for the first time, inverted commas have twined themselves around the word "Artifacts," in the heading of Mr. Moir's letter—no doubt independently of his volition. Thus do coming events cast their shadows before.

In my last letter I used a technical term, well established in the language, spoken and written, of practical Archæology, but, apparently, new to Mr. Moir. Most people would understand its meaning at sight; as Mr. Moir professes himself unable to do so, I may refer him to J. P. Droop's "Archæological Excavation" (p. 52), published in 1915 by so eminently respectable an institution as the Cambridge University Press, where he will find the word, with its definition. It needs no apology; it is an expressive word, and, unfortunately, a very necessary word. The same cannot be said of that dreadful concoction "lithoclassiology," which has lately come into vogue among Mr. Moir's circle of admirers—a word that has not even got the advantage of meaning what its inventors apparently suppose it to mean; a Polyphemus of a word, monstrum horrendum, informe, ingens—and very emphatically, and in more senses than one, cui lumen ademptum!

I do not propose to continue this corre-spondence. I value very highly the matter that usually appears in Man, and I grudge the space taken up by an absurd farce, which from first to last has been nothing but a meaningless, futile waste of thought, trouble, time, money, paper, and printers' ink. When the report to be presented to the Society of Antiquaries has been published, my colleagues and I will find some opportunity of checking it over on the spot. If we discover anything that calls for notice, we shall deal with it; and then the curtain can be rung down finally.

Yours faithfully,

R. A. S. MACALISTER.

SIR,-I have made a careful examination of the flakes and implements from Sligo, discovered by Mr. Burchell, and I readily recognise upon them the marks recorded by the blows which had detached them from the parent rock. From these marks it is not difficult to determine the direction in which the blows had been delivered and thence to infer that they were not the result of accident but of intent.

I regard them, therefore, as implements fashioned by the hand of man. It seems to me difficult, at present, to make any positive assertion of their age : but I am informed by Mr. Dixon, of H.M. Geological Survey, that two of the specimens were found in an interglacial deposit and two others at the base of the Lower Till of the locality. Should the Lower Till represent the Riss glaciation, as seems probable, then the earlier series would be Lower Palæolithic (probably Lower Mousterian) and the later series Middle Mousterian of exceptionally rude workmanship.

These are the first limestone implements discovered in the British Isles, but it must not be overlooked that an industry of the same material has been found at various localities in the south of France. Thus, as Professor Boule informs us, three true bouchers in limestone were discovered as far back as 1879 by M. Rivière in the cavern Lympia at Nice, and, later, another in the Grotte de l'Adaouste in the Bouches-du-Rhône. To these we may now add the bouchers and other ruder forms from La Grotte de l'Observatoire at Monaco which have been made the subject of an exhaustive monograph by Professor Boule. The ruder forms, which are fairly comparable with those from Sligo, are associated with a warm fauna (elephas antiquus and hippopotamus) and are almost certainly contem-poraneous with the ancient sea-beaches characterised by Strombus bubonius.

The resemblance of Mr. Burchell's specimens of the earlier series to some of those at Monaco has been remarked and commented upon by no less an authority than the Abbé Breuil.

Yours faithfully,

28th Nov

W. J. SOLLAS.

Egypt: Physical Anthropology. Thomas. Right-Handedness.

To the Editor of MAN.

SIR,—Before attributing Left-handedness to the Ancient Egyptians, as Dr. Harrower does from the examples he quotes in his interesting article under the above title (Man, 1928, 104), there are several qualifying factors which should be considered.

The figure of Tutankhamen holds his rod in his left hand, but has a club in the right. The female figures he mentions support their head-loads with the left-hand, but in the right each carries a live bird. I am left-handed and would, I feel, in the circumstances, carry the heavy bird in my left. Anubis (statuette), again, clearly once held another weapon in his closed right-hand. King Seti holds the incense spoon in his left, but with his right he directs a stream of water into a pot from a libation vase. The same king is shown (facing left) offering Truth (maat) to Osiris, on his Theban tomb walls, and on his temple walls at Abydos: in the one case with his left hand, in the other with his right! In the former he touches the god's staff with his right; in the other his left is deferentially raised. (Breasted, "History," figs. 153, 154). The incense spoon is apparently usually held in the left hand because the right is used for the more directive operation of feeding it with incense pellets, or controlling the holy-water stream as above. I have examined several books of plates representing artisans, etc. at work and in no instance have I found a "left-hander" whose case could not be accounted for by the exigencies of art convention and composition. (Cp. the vase-drillers, loc. cit., fig. 43). The Sherden warriors (loc. cit., fig. 163), facing left, carry swords in their left hands. This seems a clearer example of left-handedness. Yet most of the interesting detail of their corselets and girdles would be eclipsed by the round shields had they been carried on the left arms. It should be remembered that with formal figures, sculptured on the side walls of shrines, etc., their attitudes are largely determined by the direction they have to face (chests to the

front): towards kings, or gods, or shrines.

Hence probably the reason that both
Mentuhotep I and III, facing left (chest to the front) are represented with clubs high upraised in their left hands on their temple walls (Capart, "L'Art Egyptien," pl. 140; Fechheimer, "Die plastik der Aegypter," p. 135). This is also "Die plastik der Aegypter," p. 135). This is also probably why fowlers, when they face left (Wilkinson, "A. Egyptians," figs. 248, 249) wield their throwing-sticks in the left hand. If the same artistic exigencies and conventions controlled the Indian sculptor in the Angkor example quoted by Dr. Harrower, it is clear why the left arms of men, facing left, are used to carry the serpent: the object being to show as much of it as possible. That there were, more than probably, cases of left-handedness among the Ancient Egyptians it would be foolish to deny, but that they were more lefthanded than their modern normal repre-sentatives cannot, I venture to think, be deduced from the ancient monuments in the way Dr. Harrower suggests.

Yours faithfully,

ERNEST S. THOMAS.

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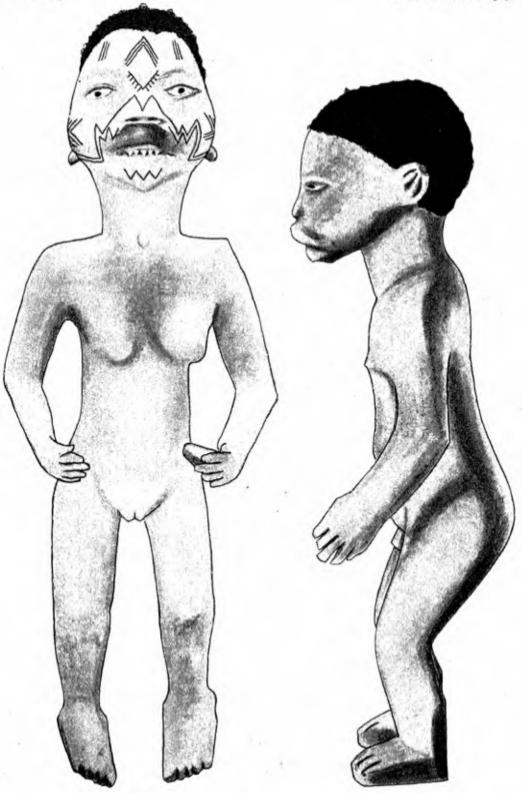


Fig. 1. Fig. 2. WAMAKONDE WOODEN DOLLS, PORTUGUESE EAST AFRICA.

ORIGINAL ARTICLES.

With Plate B.

Africa, East: Ethnology.

Collings.

Notes on the Makonde (Wamakonde) Tribe of Portuguese East Africa. $By \ H. \ D. \ Collings$.

17

The Makonde, to whom this note refers, inhabit the area bounded by the Ruvuma, Msalo, Mwriti, and Lujenda rivers, and by a line drawn approximately parallel with the coast line and about 20 miles west of it. That is to say, their country commences a little over one day's journey inland. All of this area is under

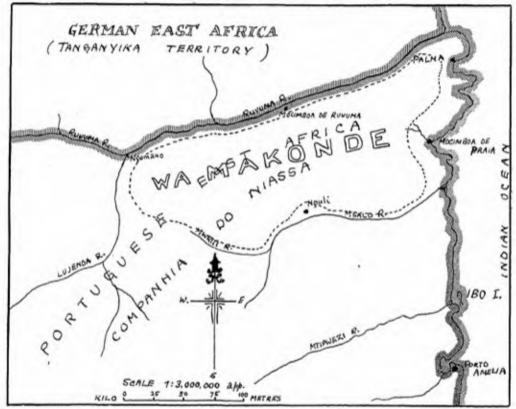


Fig. 1.—Sketch map of portuguese nyasaland to illustrate position of the makonde tribe.

the jurisdiction of the Companhia do Niassa, and is situated in the Conselhos or districts of "Moçimboa" and "dos Makondes," with capitals at Moçimboa de Piraia on the coast and at Moçimboa de Ruvuma on the Ruvuma river.

The Makonde are a Bantu-speaking tribe, and, as far as is known, have no admixture of foreign blood, the captured women and children of neighbouring tribes being excepted. Their only weapons of offence are bows and arrows, no shields or spears being carried, although in former times there were a fair number of trade guns distributed among the more influential natives.

In Fig. 2 is shown the type of arrows used. The average length is about 3 feet 3 inches to 3 feet 4 inches, although some are a few inches longer, and others are shorter than the average. In every case where metal heads are used, the shaft is of bamboo. The metal heads have a long tang which fits into the natural hollow

in the shaft, the latter being firmly bound with a flat fibrous substance produced from the root of some shrub. This binding is put on wet, and acquires with time a dark brown colour. The heads are very well forged from iron, and are "blued" or rather "blacked" all over, with the exception of the edges, which are kept sharp and bright. The feathering is of domestic hen or guinea fowl feathers, and

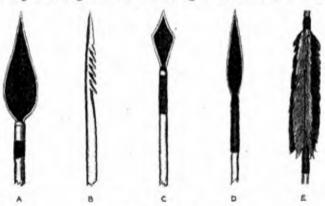


Fig. 2.—Makonde arrows.

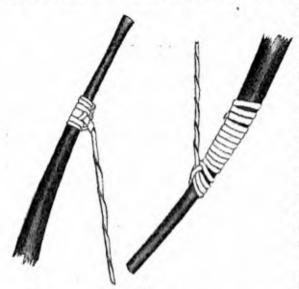
Various types of arrow heads;—a, c and d, iron heads,
Bamboo shaft; b, wooden shaft, carved head;
E, feathering of domestic hen feathers.

in every case consists of four feathers so arranged that each supports the other. This is illustrated in the diagrammatic



DIAGRAMMATIC SECTION THROUGH FEATHERING OF ARROW TO ILLUS-TRATE METHOD OF FEATHERING. NOT TO SCALE.

section. Sometimes the feathers are bound to the shaft in the middle (Fig. E), but in many cases there is no such binding. The feathers are not split in any way, but are bound to the shaft at both ends with the underside upwards. The nocks



A. B.
FIG. 3.—MAKONDE BOWS.
METHOD OF ATTACHING THE TWO ENDS OF THE RAWHIDEBOW STRING. NOT TO SCALE.

are quite simple and unplugged in any way. The end of the nock reaches in every case to the binding of the feathers. I have arrows in my possession with nocks varying between \(\frac{1}{4}\) inch to 1 inch.

The bows are about 5 feet 9 inches in length along the curve, are circular in section throughout their length, and are made of a close grained reddish wood, which is polished smooth. The bowstring is made of the untanned skin of the duiker or steenbok, and is twisted so that it becomes circular in section. One end of the string is permanently attached to the bow by means of a complicated interlaced knot (Fig. 3, A), and is sometimes even plaited to the shaft. The other end is fast-

ened as at B, Fig. 3, and the loose end is wound round the shaft and then turned in under the last few turns. There is no device to prevent the string from slipping along the shaft except the grip the knots themselves afford.

These bows are hardly ever unstrung and are usually carried with three arrows only, no kind of quiver being used. The effective range is up to about 30 or 40 yards, and at that distance there is good penetration. They are chiefly used for killing small game, such as Livingstone antelopes, duikers, and bush buck.

The Makonde smoke tobacco in pipes, formed of a young coconut shell as a water container (Fig. 4), from which issue two hollow bamboos, one being capped with a movable pottery bowl and the other being used as a stem or mouthpiece. They are usually strengthened by two pieces of bamboo bound together and sharpened at one end, so that the pipe may be stood upright on the ground, with the bamboo supports sticking into the ground.

The pipe illustrated in Fig. 4 is rather a superior type, although the principle is the same as in the commoner varieties. It consists of two hollow bamboos stuck into a coconut shell from which all the "meat" has been removed. strengthened by a curved and carved piece of wood, one end terminating in a foot and leg and the other in the head of some animal. The central part of this piece

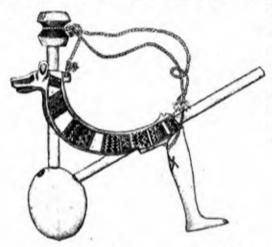


FIG. 4.—DIAGRAM OF TOBACCO PIPE USED BY THE MAKONDE (WAMAKONDE) TRIBE OF MASIMBWA DISTRICT, PORTUGUESE NYASALAND.

is carved with designs similar in many ways to the tribal marks on the natives themselves. There is also a representation of the tribal marks on the back of the leg. The bowl of the pipe, contrary to usual practice, is made of wood, instead of pottery, and is fixed to the pipe by means of a twisted bark string. The carrying cords are also of twisted bark.



SECTION OF TOBACCO BOWL (DETACHABLE)

These pipes are carried about slung over the shoulder by means of the string, the body of the pipe coming under the When several arm. men wish to smoke, showing method one who has a pipe OFFIXING TO PIPE. sticks it in the ground

in front of him, and, tobacco having been produced, he cuts off a portion from the roll. He then cuts this up finely, and rolls it between his hands before putting it into the bowl of the pipe. He then presses a red-hot ember on to the tobacco with his hands, drawing vigorously the while at the mouthpiece. When the pipe is drawing properly, and the first man is literally full of smoke, he hands it to the next man, who inhales in great gulps and passes it on. Meanwhile the first man blows out the smoke, and coughs, and chokes, and spits, and often has difficulty in breathing for a short while. Owing to the speed with which it is smoked, the tobacco does not last more than about a dozen puffs. The women do not smoke.

The tobacco is grown by the Makonde themselves, and is dried and twisted into long ropes about half-an-inch in diameter, which are then plaited together, and rolled up in lengths of about two feet six inches. Three fingers' breadth of a roll of tobacco costs about one penny.

The Makonde are very clever at carving in wood, and some of their best things are the little dolls which they make. (See Pl. B, Figs. 1 and 2.) These range in height between one and two feet. Their use is unknown, but I have been told by coast natives that they are used in dances. The wood from which they are carved is a soft white wood with large central hole filled with pith. It is worked

when quite green and does not split when dry.

Plate B, Fig. 1, shows a model of a Makonde woman, and is about 16 inches high. The upper lip is represented as being distended by the "Ndonya," an ebony lip ring, and the face is covered with the usual tribal marks. The front upper teeth are pointed, as are those of all Makonde; this also being a tribal mark. The head is covered with real human hair, which is driven into the wood by some blunt instrument of the screw-driver shape. A small piece of wood has been left joining the body and left hand together. The right hand has no similar connection with the body. In nearly every doll which I have seen, the left hand is so joined, but not the right.

Plate B, Fig. 2, shows the figure of a man, also with real hair but without tribal marks. The mouth is closed, and the hands have no connecting piece with

the body.

This doll has been stained red with some vegetable substance, with the

exception of the eyes, which are left white.

Both these models stand upright alone when placed on their feet, as do all which I have come across. They are not very common, and it appears that only a few of the natives know how to carve them. H. D. COLLINGS.

Prehistory.

Perry.

Sumer and Egypt. By W. J. Perry, M.A.

Our knowledge of the early civilisation of Sumer is increasing rapidly. Each season's work at Ur and Kish is rich in results, all of them illuminating. This is especially the case with the excavations carried on at Ur under the direction of Mr. C. Leonard Woolley during the season 1927-28. For they have revealed a condition of things that is particularly arresting. The work has shown the existence, at the beginning of Sumerian civilisation, of an advanced stage of culture. The people already had a well developed class system; complicated burial customs; and a rich ceremonial paraphernalia, including the use of gold, silver, lapis-lazuli, carnelian and other materials.

The most striking characteristic of this civilisation, in its earliest period, is the simultaneous presence of three different modes of disposal of the dead.*

They are:

- 1. Simple inhumation in a grave. The body is wrapped in a mat. In rare instances it is placed in a wooden coffin. These burials have furniture, sometimes extremely rich.† In one grave, that of Mes-halam-dug (PG/755), the coffin had panels framed by stout uprights, three on each side.1
- 2. The body placed in a clay coffin (larnax) in a grave. These are the poorest graves of the cemetery, for there is little or no furniture.§
- 3. Shaft tombs, with a dromos or stairway. The tomb is of brick and stone, with corbel vaulting and arches. Sometimes there are timber roofs. These tombs contain royal burials. The bodies are in wooden coffins or on biers. Human sacrifices accompanied the royal burials. The grave furniture was very rich. A funerary chapel was built on the ground surface.

^{*} C. Leonard Woolley, "Excavations at Ur, 1926-27." Antiquaries' Journal, VIII, 1928; "Excavations at Ur, 1927-28," idem.

[†] Woolley, loc. cit., pp. 5, 422.

[‡] Ibid, 426.

[§] Woolley, op. cit., pp. 5, 6.

[|] Woolley, op. cit., pp. 421-5, 430, 431, 436.

These complicated burial customs present a group of problems for solution. But the evidence necessary for this purpose is not forthcoming at present in Sumer itself. Perhaps further work at Ur, or elsewhere in Sumer, will reveal an earlier stage of development of this civilisation. It would be unjustifiable, however, to assume that the discovery of such earlier evidence is inevitable.* That issue can only be considered if the occasion arises. Meanwhile it is useful to consider a series of facts derived from the study of tomb development in Egypt during the time from the late pre-Dynastic period to the end of the Second Dynasty. For these facts have a bearing on the conditions found in the earliest cemetery at Ur. The items may be taken in turn.

1. Burial in mat. It was characteristic of pre-Dynastic burial practice in Egypt to protect the body from contact with the soil by wrapping it in matting, or the skin of some animal, in addition to the covering of linen, in which the body was usually swathed. This form of burial persisted in the poorer graves throughout the Old Kingdom.

2. At the end of the pre-Dynastic period the practice was introduced of lining the grave with bricks or vertical sticks of wood, to keep the soil away from the corpse, and so do away with the need for skins or matting. Such lined graves assumed a rectangular form, and they were roofed with logs of wood. † The bricks were of mud, sun-dried, and biscuit-shaped. In the course of time the method of lining the grave with sticks was abandoned. When the copper chisel was invented, and the working of wood was thus facilitated, the use of walls of sticks to hold back the sand was abandoned, and slabs of wood were fashioned to form a box to contain the corpse. Thus the coffin was invented.[‡] At first its use was reserved for those who could command the valuable wood and the services of the craftsmen skilled in the newly devised practice of carpentry to make the wooden boxes. Wooden beds were used in First Dynasty burials.§

3. During the First Dynasty the poorer people imitated the wooden coffin in mud and pottery. They made these coffins at first of rectangular shape, and later adopted an oval form, doubtless because they realised that the rectangular form (determined by the use of such materials as wood and bricks) was not essential, and in pottery-making the elliptical shape was easier to fashion. The clay coffins of Ur were elliptical, and, like those of Egypt, were used by poor people. Wood must have been expensive and costly to work in both places, and the pottery coffin would be a cheap substitute.

Royal tombs apparently first appear in Egypt at the end of the pre-Dynastic period. They were well established in the First Dynasty, and henceforward they led the way in innovation. At first tombs were entered from the top, and were roofed with beams. Then they became deeper, and were approached by a stairway. This phase of development continued until the end of the Second Dynasty. Then corbel vaulting appeared, and was generally practised in the richer tombs. The introduction of corbel vaulting in Egypt is ascribed by Reisner and Mace to the difficulties experienced in roofing large underground chambers with timber. The beams would soon be destroyed by white ants, and be unable to bear the super-

^{*} It does not seem probable that this civilisation developed out of the prehistoric "painted pottery" civilisation. Cf., Hall and Woolley, "Al 'Ubaid." Oxford, 1927. Chapters I, VIII. † G. A. Reisner, "The Early Dynastic Cemeteries of Naga-ed-Der." Part I. University

of California Publications. Egyptian Archeology. Vol. II. Leipzig, 1908, pp. 8, 89, 90. A. C. Mace, op. cit., Vol. I, Part II. 1909, pp. 6 seq.

Reisner, op. cit., 89, 90. Mr. Brunton and Miss Caton-Thompson ("The Badarian Civilisation," p. 53) place wooden coffins in the Early Pre-Dynastic period.

[§] Petrie, "Tarkhan," p. 23. || Reisner, op. cit., p. 89; Mace, op. cit., pp. 34, 35.

[¶] Petrie, "The Royal Tombs."

incumbent mass of sand and brickwork. Consequently it is supposed that the Egyptians adopted corbelling (either accidentally from the collapse of brickwork or intentionally designed) as a method of roofing their tombs. Reisner and Mace think that the first use of corbelling was made in the royal tombs of Perabsen and Khasekhemui of the Second Dynasty. However that may be, it is known that corbelling was adopted about this time in Egypt.*

The use of stone for building began in the reign of Khasekhemui.† The tomb of Den, a king of the First Dynasty, had a granite floor.‡ That is the first actual evidence of stone construction. But Khasekhemui had a chamber in his tomb of

worked limestone, the same stone as was used for the rubble walling at Ur.

The tombs of Egypt had superstructures with walled enclosures above ground from the beginning of the Dynastic period. These were developed from the small

mounds placed over the pre-Dynastic grave.§

The Egyptians, therefore, starting with the simple grave of the pre-Dynastic period, in which the body was wrapped in a skin or a mat, gradually developed their burial practices until, at the end of the Second Dynasty they had acquired a series of practices closely similar in every way to those found at Ur in the earliest cemetery. In Egypt the poorer classes of graves continued to exhibit the earlier modes of disposal, while those of royalty and the nobility showed the latest developments. Egypt of the Second Dynasty and Ur of the first cemetery thus have in common:—mat burial; pottery coffins; wooden coffins and biers; corbelvaulting; stone for construction; stairway (especially for the more important tombs); wood roofing; biscuit-shaped bricks; and mortuary chapels above ground. In both places the practices have similar associations; they reveal a definite class-system. The differences are few: Ur had burnt brick, while Egypt had not; Ur had the arch, which has not yet been indicated in Egypt at so early a date, except in a crude form in the superstructure.

A similar result emerges from the examination of the grave furniture of the earliest cemetery at Ur. This includes the use of gold, silver, electrum and copper; lapis-lazuli and carnelian beads; malachite for face paint; steatite and calcite for vases; tablets with writing; inlay work; heraldically opposed animals as an art motif; broad chisels, adzes, spears; pear-shaped mace-heads; and cylinder seals.**

As in the case of the grave types, it can be shown that the Egyptians gradually

and slowly accumulated the corresponding items. ††

The pre-Dynastic period in Egypt may conveniently be divided into three periods: Early, Middle and Late. This classification holds good whether Petrie or Reisner be followed.‡‡

Certain items of the equipment of the Ur people were already in possession of the Egyptians in the Early pre-Dynastic period. Among them are the use of

^{*} Reisner, op. cit., 11-13, 14; Mace, op. cit., 4. † Petrie, op. cit., II, 13; id., Man, 1910, 79.

[‡] Petrie, "The Royal Tombs," I, II; II, 9. Worked limestone slabs were used earlier in this Dynasty (Petrie, "Tarkhan," p. 15).

[§] Reisner, op. cit., 5-6; Petrie, Man, 1913, 85.

Mace, op. cit., 4-5.

[¶] Mace, ibid., 10, 12, 15, 16, 27-31.

^{**} Woolley, op. cit.

^{††} It will be noticed that no attempt is being made here to discuss details of types. My reasons are to economise space, and to emphasise the vital issues. For instance, the use of lapis-lazuli is a more fundamental fact, from the point of view of the history of culture, than the particular use made of it by any people. This matter will be discussed at length elsewhere.

particular use made of it by any people. This matter will be discussed at length elsewhere.

†‡ Sir W. Flinders Petrie, "Diospolis Parva" p. 4; "Prehistoric Egypt," p. 3; Reisner,
"Archæological Survey of Nubia," Vol. I, 1910, p. 315. The inclusion of the Badarian
culture would only serve to strengthen the argument.

copper, malachite, steatite and calcite. The use of copper was restricted to foil, wire needles, beads, harpoons and thin graving chisels.*

In the Middle pre-Dynastic period the Egyptians were using gold, silver, "cylinder-seals"; pear-shaped mace-heads; broad copper chisels; lazuli and carnelian

beads; and heraldically opposed animals in art.†

The Late pre-Dynastic period witnessed the beginning of brickwork, writing‡ and, perhaps, of the class-system. That is to say, the pre-Dynastic Egyptians had acquired materials and other cultural elements that were found at Ur in the earliest cemetery. Their use survived in Egypt well into the Dynastic period, which flows

on continuously from the pre-Dynastic period.§

No attempt has been made to make a complete catalogue, for that would occupy too much space. But enough has been said to indicate the nature of the available evidence. It can now be seen that the civilisation of the people at Ur closely resembled that of the Egyptians, and that the similarity culminates at the end of the Second Dynasty, after which Egypt continued to develop and modify her practices, while Sumer apparently stagnated. There are, of course, differences between the two cultures. Mention may be made of the presence of the wheeled vehicle at Ur, and its absence in Egypt; the presence of the alphabet in Egypt, and its absence at Ur. But these unilateral occurrences do not concern us at present. They are the exclusive distinctions of either country, and are to be considered as such. concern at present is with the elements common to both countries. These are so many, and so diverse, as to make it inconceivable that any serious student would claim them to be the result of independent development in either country, particularly when one of the two places (Sumer) reveals, as yet, few signs of a development in the elements of culture common to both. Moreover, most scholars now admit the community of origin, however much dispute there may be as to when the pioneers did their work. I shall, therefore, place this possibility on one side, and canvass those based on the theory of influence. These are three in number :--

Sumer influenced Egypt, directly or indirectly;
 Sumer and Egypt drew from a common source;

(3) Egypt influenced Sumer, directly or indirectly.

(1) The claim that there was a diffusion of culture from Sumer to Egypt would be hard to define; for it would be difficult to determine when such a hypothetical influence was active. If it be assumed to have come at the end of the Second Dynasty, little else than corbelling might have been introduced. The problem would have to be faced of accounting for the existence of the rest of the cultural equipment in Egypt before the arrival of Sumerian influence. This hypothesis reduces the influence of Sumer to a negligible quantity, and really explains very little.

If the point of contact be chosen at an earlier date, say, at the beginning of the Dynastic period in Egypt, the same difficulties arise, and in an aggravated form. For Egypt had already acquired a culture similar in many respects to that of Sumer, and, in terms of the tentative hypothesis on which we are working, independently of Sumer. Egypt already had the cylinder-seal; pear-shaped mace-heads; gold, silver and copper; malachite, lapis and carnelian beads; calcite and steatite vases. We are to assume, moreover, that, whereas the Egyptians had independently acquired these elements of culture, which they possessed in common with the Sumerians at the time of contact, they forthwith adopted Sumerian customs, and owed their further developments to the influence of these foreigners. But it would

* Petrie, "Prehistoric Egypt." See index for the various items.

[†] Petrie, op. cit. Gold may have been used in the early period. Cf. "Prehistoric Egypt," 43.

[‡] Id., p. 44; Reisner, "Naga-ed-Der," 122. § Reisner, "Naga-ed-Der," pp. 132, seq.

be difficult to explain the hypothetical "lag" in Egypt such a speculation involves. For whereas the clay coffin presumably was adopted immediately, it took nearly two Dynasties for the corbel vault to be imitated. The adoption of the clay coffin by the Egyptians presents a difficulty, for in Egypt it was originally rectangular, obviously in imitation of the wooden coffin, and only later became elliptical, as in Sumer. The evolution of the wooden coffin is clear in Egypt-it is, in fact, the only evidence we have of the invention of carpentry-and there does not seem to be any cause why we should assume that the Egyptians learned the practice from the Sumerians. The Sumerians may, indeed, have stimulated the Egyptians to invent writing, but if that were so their pupils went one step further and invented the alphabet, which was unknown in Sumer. Reisner has demonstrated that writing was devised in Egypt without any outside influence.* The use of stone for construction raises another difficulty. At Ur limestone rubble was used for the tomb walling, whereas in Egypt the granite flooring of the tomb of Den and the limestone chamber of the tomb of Khasekhemui were made of worked stone. It is true that the Sumerians used a certain amount of worked limestone at a later time,† but they soon abandoned the craft, whereas the Egyptians developed it to a tremendous extent in the pyramids and subsequent buildings. That is to say, the Egyptians, in their writing and stone-working, immediately outstripped the Sumerians, who we are for the moment supposing to have taught them.

To postulate Sumerian influence at a date earlier than this would introduce so many complications that it is doubtful whether anyone would venture on such a bold enterprise. The problem would be comparable to that at the end of the pre-Dynastic period, with painted pottery and stone vases thrown in as complications. But whether the point of contact be assumed at the end or in the middle of the pre-Dynastic period, the earlier phases of the pre-Dynastic period are there demanding explanation. At the most, such a hypothesis can explain but a small part of the early Egyptian civilisation. In point of fact, it raises insuperable difficulties. There

is no evidence to justify such an interpretation.

(2) Recourse may be had to the hypothesis of a common source of inspiration. The only answer to that is to demand some evidence of the whereabouts of such a source, and of the necessity of postulating it. Were it necessary to account for two sets of conditions such as we find at Ur, then such a hypothesis might be reasonable. But when one country can display the process of accumulation of most of the culture of the other, then good reason must be forthcoming for rejecting that

country as the source of inspiration for the other.

(3) The hypothesis that Egypt influenced Sumer, directly or indirectly, satisfies all the known facts and conditions. In Egypt a process of development of culture took place, lasting from the beginning of the pre-Dynastic period to the end of the Pyramid Age in the Sixth Dynasty. During this time the process of development was continuous. Each age received its cultural capital from that which preceded it, added to the equipment, modified it and handed on the result to its successor. This process, consequently, lasted long after the end of the Second Dynasty, the period of especial interest at the moment. At that time Egypt and Sumer were more or less equivalent in culture. But Sumer stagnated for a thousand years at the same level, or even degraded, while Egypt went on to the triumphs of the Third and Fourth Dynasties, in which she far outstripped her neighbour of Mesopotamia. Just after the days of Khasekhemui, Imhotep was designing the pyramid temple of Zoser, with its "Doric" columns and its wonderful glazed tiles; the solar calendar was in use, a thing that the Sumerians never acquired; the

^{*} Reisner, "Nagar-ed-Der," 123, seq.

[†] Hall and Woolley, "Al 'Ubaid," p. 66 and n. 1.

Egyptians were already setting out on their career of art that soon culminated in the triumphs of the Third and Fourth Dynasties. In all this majestic onward sweep there is no room, there is no need, for the stimulating influence of foreigners; and there is no evidence of such interference. By their deeds, or lack of them, the Sumerians show themselves incompetent for the rôle of teachers. They have to their credit the socketed celt, the wheeled vehicle, burnt bricks, but little else. What is that to put beside the solar calendar, the alphabet, mummification, architecture in stone, and the other achievements of the Egyptians? On the contrary, it is natural that the most progressive civilisation of antiquity should influence its neighbours, and that these less inventive folk, even when they had acquired some Egyptian culture, should stagnate while Egypt progressed.

Much more could be said on the subject. But in a short communication such as this points must be made with economy of illustration. I hope, however, to have shown that there is reason to conclude that the earliest cemetery at Ur reveals a civilisation based ultimately on that of Egypt, in the days of the Second Dynasty,

and, probably, in the reigns of Perabsen and Khasekhemui.

W. J. PERRY.

Britain: Archæology.

Warren

Beach Flaking Sites in Somerset. By S. Hazzledine Warren.

During a visit to Minehead and Porlock I found large quantities of flakes strewn over the coarse shingle beaches. The rock of which they are made, a hard quartzose Devonian grit, is very different in texture from the limestone of Rosses, yet the technique and the underlying intention which is indicated by the work is similar to a very remarkable degree in the two groups.

For a time it looked a good argument that, as the same class of flakings in different rocks was characteristic of sea beaches in different districts, the sea itself was the agency responsible. But while the sea does, of course, make flakes by hurling rocks and boulders about, that reasoning proved to be unsound as an

argument of general application.

Many of the houses at Minehead and Porlock are made of flaked stone, and upon enquiry among workmen I was informed that the stones were dressed into shape upon the shore. Two of the men came down on to the beach with me, and identified these "Mousterian" flakes as the waste product of their own industry, and one of them was kind enough to go home and fetch his hammer and demonstrate for me the method of his technique.

He showed in which directions, according to the form of the boulders, the blows must be delivered, and in which directions blows would be ineffective in producing the desired result. By trial and error the stone scapler of the Somerset beaches has acquired a thorough working knowledge into the first controlling principle of all flaking (whether by nature or by man) to which the writer has given the name of the "Planes of Least Resistance."

I was given to understand that beach scapling is still permitted in Somerset under certain restrictions, but public authorities have now for the most part prohibited this work, and, not being seen in operation, we have overlooked the fact that for centuries the sea-shore has been locally used as the most convenient and economical form of quarry.

At Cromer, as I have explained in brief outline on a previous occasion,* there is conclusive evidence to show that the sea is still continuing to make the beach flakes which gradually become ochreous. Near Cromer I also obtained evidence

to show that the flakes from flint scapling sites of historical date come down on to the beach from the erosion of the coast. It is familiar knowledge that prehistoric

implements and flakes likewise occur as derivatives on the shore.

Further complications are introduced on to the beach sites by derivative flakings from glacial deposits, and from the mechanically crushed basement beds such as that below the Weybourne Crag. While on such a beach as Budleigh Salterton, the underground flakings from the still older Bunter formation have to be taken into account.

Eastbourne furnishes us with another beach flaking site, although it is less conspicuous than Minehead or Cromer. At Eastbourne, so far as I have yet been able to ascertain or infer, the sea alone is responsible for the flakings that I have collected from the beach. The character of the flakings themselves is also somewhat different from those of Minehead, which are known to be scapling.

Viewing the beach flaking sites as a whole, I think much of the difficulty and confusion of interpretation has arisen from the fact that the flakings are of diverse origin, and that the true origin of some portion of a complex assemblage of modern

beach drift has been mistaken for the origin of the whole.

The Minehead and Porlock experiences have substantially advanced my own knowledge of the special characteristics of scapling of the modern or historical period, and I venture to submit that the problem of the Rosses flakings will have to be reconsidered upon an entirely new basis. To me, the comparison with scapling fixes what one might call their upper limit; that is to say, they cannot be anything more than scapling-waste.

In view of the importance of the material facts of scapling in their bearing upon prehistoric theory, I propose to ask permission of the Anthropological Institute to make a small exhibition in their rooms to illustrate this subject.

S. HAZZLEDINE WARREN.

Britain : Archæology.

Vulliamy.

Excavation of an Unrecorded Long Barrow in Wales. By C. E. Vulliamy.

Some years ago Mr. A. F. Gwynne directed my attention to the remains of a long barrow on ground belonging to Little Lodge Farm, near Glasbury, on the Breconshire border. The site is close to, and south of, the road leading from Aberllynfi to Tregoyd, at about 440 ft. O.D. and 200 ft. above the valley of the

Wye. I have recently carried out an excav-

ation in this barrow.

As far as I am aware, there is no record of this barrow, although the remains are conspicuous enough, even to the least observant; nor is there any local tradition or name-association which can be connected with it. It is impossible to determine its exact outline. The orientation, as will be seen from the attached plan, is rather unusual-apparently 16° west of true north. The barrow is built upon ground which slopes from north to south, and which falls away

sharply, some 50 yards below the site, to the deep-cut valley of a small brook. Immediately to the north is a hillock, on the top of which is a large mound.

In general character the barrow resembles those at Ffostill, which I excavated and described in 1922 and 1923. It is built of slabs and blocks of red sandstone.

with a certain proportion of small glacial and water-worn boulders. The chambers are of megalithic type; but it is to be noted that, at the points marked X on the plan and shown by three parallel lines, thin laminated pieces of sandstone have been laid in horizontal courses, forming connecting walls—a feature which I have

not previously observed in a Welsh barrow.

The greater part of this long barrow has been destroyed, but not within living memory. Many hundreds of tons of stone must have been removed from it, perhaps for the construction of the road. The broad end is to the north, but all traces of the periphery at that end have been obliterated. I should estimate its original length at about 200 ft. At the southern end, where the converging sides of the mound can still be distinguished, are the clearly visible remains of a small chamber of the usual megalithic design. This chamber had been rifled prior to my excavation. A little below what I consider to be the centre of the mound, a large terminal slab, shown at the bottom of the plan, stands out conspicuously. There were indications of the presence of the other slabs, but these were not clearly revealed until the excavation had been made.

With the kind permission of Mr. C. Walker, the owner of Little Lodge Farm, and the most able assistance of Mr. Percy Pugh, I was enabled to explore thoroughly the area shown on the plan, as well as the small terminal chambers.

These chambers are shown on the left of the plan, plotted to the same scale. Their position is 24 ft. south of the large terminal stone. Excavation here revealed nothing except an untrimmed flint flake in the chamber marked with an X.

We then began to excavate to the east of the large slab, and after two or three hours' work we found a deposit of human bones. These bones lay at a depth of three feet from the surface, and were jammed-like those which we afterwards discovered-between small blocks of stone. They were damp and extremely friable, like pieces of wet biscuit, and consisted mainly of the broken cranial bones of an adult male, together with splinters of the long bones. It was impossible to preserve any considerable fragment. Working above this point, we came on a number of bones in a far better state of preservation, but all more or less crushed and broken. The arrangement of the burials could not be determined from the position of the bones, but it was evident that, if these bones were the remains of complete bodies (as they appeared to be), the bodies must have been entombed in the customary flexed position. As in my previous excavations, I found few unbroken bones. I had the good fortune, however, to obtain some extremely interesting fragments of skulls, and from these, with the associated limb bones, it has been possible to arrive at some knowledge of the human types represented in the burials.

The area explored is shown on the plan by an enclosing line.

I will now describe briefly the human remains, which are those of five adult males, an old woman, and two (possibly three) children. From the fact that the remains of the latter were in each case in contact with the foot bones of male skeletons, it may be conjectured that the bodies of the children had been placed at, or near, the feet of the men.

The letters A B and C on the plan mark the places where we found the three most interesting and best preserved skulls. At A we discovered part of the frontal bone and the broken upper and lower jaws of an individual of some 50 years of age. The teeth are deeply but evenly worn, the supra-orbital ridges are strongly marked, and the nasal bones project sharply. The skull at B was in actual contact with that at A, but much better preserved. The cranial vault had been crushed downward by a slab of stone, which had jammed tightly, protecting the upper and lower jaws. With the exception of slight damage to the angles of the lower jaw, both maxillaries are complete. The two middle incisor teeth are missing from the

upper jaw; otherwise every tooth is firmly in position in both jaws, and every tooth is perfect. Sir Arthur Keith has drawn my attention to the crowding of the incisors of the lower jaw—a characteristic of modern man. In this case, as in that of A—the chin is prominent and strongly modelled. The skull is that of a man of 30 to 35 years of age. Both these men were dolichocephalic, with long faces, well marked cheek bones, and broad, rather massive chins. At C was deposited the better part of a male cranium, that of a man past middle-life, with a fragment of the lower jaw. The frontal bone is extremely robust and of more than ordinary thickness. The occipital has a peculiarly rugged aspect, and indicates great muscular development.

Sir Arthur Keith informs me that the bones of these three skulls were evidently broken at, or soon after, death. In his opinion, the skulls are typical of the

long-barrow people of Wales.

The limb bones of these, and of the other two males, are very much more robust than those from the Ffostill barrows. I was particularly struck by the massive character of the humeri. Generally speaking, it seems to me that these individuals were both taller and sturdier than the men whose remains I found at Pen-y-Wyrlod and at Ffostill, not many miles away.

As regards the children's bones, the lower jaws showed these to be of 15 months and 4 or 5 years of age. A number of small broken and scattered bones may possibly be those of a third child. The presence of the old woman was determined by Sir Arthur Keith on the evidence of a lower jaw, the alveolar border from the region of the incisors backward having been re-absorbed in the bone.

We found no associated archæological material, but a few pinches of charcoal

were observed here and there. None of the bones was burnt.

The bones of a red deer, a sheep or goat and a small ox (possibly a calf) were

distributed promiscuously among the funerary deposit.

I think that the burials can be ascribed without hesitation to the close of the megalithic period, and I would like to suggest that the bones may give evidence of racial admixture. The presence of definite walling in association with megaliths may also point to the phase of transition between the megalithic and beaker cultures.

The possibility of this barrow, and others in the district, having been rifled at the beginning of the last century is indicated by a passage in Theophilus Jones's "History of Brecknockshire" (Vol. II, pp. 435-6), published in 1809. A friend of Jones, it would seem, opened several mounds in the neighbourhood of Crickhowell, finding therein bones and pieces of charcoal but "no weapons or other marks of antiquity." As he was only concerned with what he regarded as "marks of antiquity," the bones did not interest him.

C. E. VULLIAMY.

Metallurgy.

Davies.

OPEIXAAKOE. By O. Davies.

A long discussion on the subject of δρείχαλκος was held between Diergart and Neumann in the first years of this century in the Zeitschrift für angewändte Chemie, from which it seems fairly clear that in early Roman times this material was what we mean by brass. There is, however, an earlier reference to it in "Aristotle",* which has not been fully considered. Aristotle is here discussing the island of Demonnesus, which from later information can be identified with Halki, close to Constantinople, and he says Δημόννησος ή Καρχηδονίων νῆσος · . . . ἔστι δ' αὐτόθι χαλκός κολυμβητής ἐν δυοῖν ὀργυιαῖς τῆς θαλάσσης · ὅθεν ὁ ἐν Σικυῶνί ἐστιν ἀνδριὰς ἐν τῷ ἀρχαίω νεῷ τοῦ ᾿Απόλλωνος, καὶ ἐν Φενεῷ οἱ ὀρείχαλκοι καλούμενοι. . . . ἔστι δ' αὐτόθι σπήλαιον ὅ καλεῖται γλαφυρόν · ἐν δὲ τούτω κίονες πεπήγασιν ἀπὸ τινῶν σταλαγμῶν.

The mine at Halki is on the south side of the island at the head of a small bay. There are considerable heaps of gangue and a great deal of slag on the sea-shore, and also some miners' huts which yielded no remains. The copper crops up on the land, and, though it apparently descends below sea-level, there is no positive evidence that it was worked under water. The latest date of the mine, from pottery found on the top of the gangue heap, is about the second century A.D. As to the earliest, it is difficult to place the statues mentioned by Aristotle later than the beginning of the fifth century B.C.

To settle the question of this early doelyakers, by the courtesy of Sir Charles Martin and Professor Harden who gave me the facilities, I made an analysis of the ore. The results were-

	Per cent.		Per cent.		Per cent.		Per cent.		
Si	02	65.16	Pb	.12	Zn	.29	As	.83	
M	gO	.51	Sb	.47	Ni	3.22	Bi	.18	
Si	n	.08	Fe	3.52	Ag	3.02	Cu	11.14	
This v	vou)	d represent	a co	pper tending	to t	he composit	ion-		
Per cent.		Per cent.		Per cent.		Per cent.			
C	u	48.9	Sb	2.06	Ni	14.14	As	3.63	
Si	n	.37	Fe	15.46	Ag	13.28	Bi	.79	
P	b	.54	Zn	1.27					

Now it will be noticed that this gives an alloy which is certainly not brass. There is, however, another passage in Aristotle,* which throws some light on the question. Φασὶ τὸν Μοσσύνοικον χαλκὸν λαμπρότατον καὶ λευκότατον εἶναι, οὐ παραμιγνυμένου αὐτῷ κασσιτέρου, ἀλλὰ γῆς τινὸς αὐτοῦ γινομένης καὶ συνεψομένης αὐτῷ.

It is usually supposed that the earth of which Aristotle speaks is some zinc ore; as, however, the Halki ore contained no calcium, which would be required as a flux, and as we have Aristotle's evidence that calcium was found on the island, though it is mainly composed of quartz, we may well suggest that this earth was really some calcium salt. This is borne out if we look at Aristotle's words carefully, when we see that the Mossynoecian bronze was very white, an expression which would be accounted for by the high silver percentage rather than by zinc. Gold was also found on one of the Princes Islands in antiquity, and perhaps a little of it may have entered into the composition. Thus the early δρείχαλκος would have been the precursor not of brass but of Corinthian bronze. This would also explain why δρείχαλκος suddenly became cheap later, as the zinc-copper alloy had been discovered as a substitute for the earlier silver-copper alloy.

One word may finally be said on the subject of the Carthaginians at Halki. This is usually emended to Chalcedonians, but it is quite possible that the Phoenicians may have founded a colony at the mouth of the Bosporos, which was called New Town like its more illustrious namesake in Tunis, and was afterwards corrupted by the Greeks owing to the presence of copper. It may also be pointed out that like χαλκός, δρείχαλκος seems to be a Greek corruption of a non-Greek word, and that the meaning mountain-copper is entirely foreign to it. What the original form was we cannot say, but it may be found somewhere among the O. DAVIES. Asianic languages.

REVIEWS.

McKenzie. The Infancy of Medicine. By Dan McKenzie. London: Macmillan & Co., Ltd. 1927. Pp. xi + 421.

Early in Dr. McKenzie's book one reads of "ideas which are generated in the general " mind of the race at that stage in its " development when the magical and

" demoniac modes of thought form the "type of its cosmic philosophy." On a later page there is a further reference to "the magical process of thought" (what-

^{*} Mir. Aus., 62.

ever that may be). This is a depressing start; but let the reader be reassured: for Dr. McKenzie, despite occasional lapses such as these, has produced a book both stimulating in content and attractive in presentation. Even when we do not agree with his conclusions, we must be grateful to him for his systematic collation of facts which successfully reveal "the influence "exercised by primitive modes of observa-"tion and deduction upon the develop-"ment of medicine"—which is all that the author claims to do. The anthropologist will find it invaluable.

Referring to the causes of disease, Dr. McKenzie writes: "The savage thought " that it was a spirit more or less human " in its characters; modern science has shown us that the organism is a bacterium " or protozoon. That is really the only " difference, and it depends, not upon any " improvement upon the methods of " reasoning, but only upon opportunities " of investigating deductions by extended " and oft-repeated observations, which " were denied to early man." And, again, towards the end of the book: "It is a " fact that, however absurd folk customs " may seem to be in our eyes, there is " behind them always a good sound "reason. Man's logic is in the main "correct. What is erroneous is not his " reasoning but his facts, his observation." This is well said, and it is time that it were We may ask, What constitutes proof in a combination of reasons which we have been taught are valid, and the answer would be embarrassing. Ghosts or bacteria, these are merely symbols of a different environment and do not of themselves indicate mental superiority or inferiority. This volume affords the strongest possible refutation of any theory which places primitive mentality in a different class from our own.

Where Dr. McKenzie fails us is in his analysis of magic. While he appreciates the fact that the activities which for us are comprised in the term "medicine," meaning its science and practice, are distributed by primitives into two categories the magical and the non-magical-he does not differentiate sufficiently between magic and medicine. "In the beginning," he writes, "medicine and mysticism are one "and indivisible," and he suggests that the inherent antagonism between the two systems was not recognised till modern times. Magic, in his view, is a serious system of philosophy; but is it? In actual fact we find that there is a very clear distinction between medicine and magic and that, though both may be employed in a given case, there is no confusion in their aims. Magic, so far from being a system of philosophy, is called in either where science fails or to reinforce science by imparting an emotional satisfaction. They collaborate but do not conflict.

It is perhaps a pity that Dr. McKenzie has relied for much of his material on what he calls "authoritative text-books " of folk-lore and archæology," for the pontifical pronouncements of the past are not always accepted to-day, and many of these ex-cathedra statements, though they in no way invalidate his general argument, may prejudice a reader of a different school of thought. Few anthropologists, for instance, would agree that there is necessarily an evolutionary development of religion from a pre-animistic stage through animism and polytheism to monotheism (and incidentally there is no justification for cor-relating the Masai Engai with Mana and Manitou). Nor would the statement that " in the beginning the matriarchate, or " maternal family, alone was recognised" win the universal acceptance which the author assumes. Again, it is by no means certain that the Australian practice of sub-incision originated in a desire to restrict the growth of population, and there is little warrant for the statement that in East Africa circumcision is associated with fertility and that the uncircumcised are considered non-fertile. according to Ploss, early man considered phimosis a bar to conception and consequently adopted the practice of circumcision, why is it that the Nilotics do not practise circumcision at all, though they are characterised by a higher degree of phimosis than their neighbours, who do practise it? To state, as the author does, that in Africa circumcision has no religious standing is totally to misunderstand the significance of the operation. Dr. McKenzie rightly says that the Masai method is identical with that of the Somali, but he might, with advantage, have considered the Kikuyu method and its subsequent cultural significance. The psycho-analytic interpretation of these ceremonies deserves fuller consideration, but Dr. McKenzie's own suggestion, which, incidentally, he rejects on no very clear grounds, seems as plausible a hypothesis as any other.

The two-page list of modern botanical remedies emanating from folk medicine is instructive, but the lists given on pp. 281 and 282, illustrating the distribution of practices relating to menstruation and impregnation, are far from complete. Reference is made to the use of contraceptives by Masai, Kaffirs and Basuto, but further information is desirable on this point, as it appears probable that, though drugs are used to procure abortion, the only method of contraception known is coitus interruptus.

The chapter on surgical operations gives evidence of a remarkable degree of skill and knowledge among peoples who are generally considered primitive. A few authoritative instances of the Cæsarian section are recorded, and to what the author recounts we may add a complicated operation on the lungs which Hobley found among the Jaluo and note that the practice of trephining has a wider occurrence in Eastern Africa than Abyssinia alone. It is a fair comment that, though fractures are often competently treated, dislocations are seldom understood. A more detailed survey of the types of splints, both leathern and wooden, used by primitives would have been desirable.

This criticism on points of detail is not intended to disparage an extremely useful book, which should certainly reach a second edition. It should prove of the greatest value not only to the anthropologist, but to all medical men practising in primitive communities. It proves conclusively that both in medicine and surgery primitive man is guided by rationalism and commonsense, and shows, more even than the author has appreciated, what is the part that magic plays, and has always played, as a concomitant of science.

J. H. D.

India: Ethnography.

Hatch. The Land Pirates of India. By W. J. Hatch. Pp. 272, with 16 plates and I map. Seeley, Service & Co., Ltd.

1928. Missionaries in India, in spite of their unique opportunities for research, rarely publish any systematic account of the people among whom they serve. To this rule of reticence Mr. Hatch is a welcome exception. His "Pirates" include not only the thief gangs that wander over Peninsular India, but also the watchmen castes of the Tamil country, where thieves are still employed to guard property against theft. Most of these, however, lie beyond his purview, which is virtually confined to a small fraction of the fraternity, the Kuravars (or "Koravas," as Thurston calls them) of Salem and adjacent districts.

In domestic rites and religious practice the Kuravars, as portrayed by Mr. Hatch, differ little from other South Indian communities; even the practice of couvade, which has made them familiar to anthropologists, the Kuravars now deny. omens, Mr. Hatch suggests, are based more on common sense than superstition: if an owl hoots, the sheep-lifter had better go home, for the shepherds will hear it too and be on the alert; if the burglar knocks his foot against a stone or his head against a beam, his nervous control is not what it should be, his venture is best postponed.

On the social structure of the Kuravars Mr. Hatch is not helpful. He writes for the general reader, not for the scientist; and has many amusing yarns to tell of the professional exploits of his criminal friends.

Mr. Hatch's photographs are excellent, but he is unlucky in the spelling of Indian words (even the form "Kuravers" which he deliberately adopts, is a wrong transliteration), and most of his botanical names, too, have gone wrong. Further, it is Tylor, not "Taylor," whose "Anthro-pology" he cites (p. 29), "Cuddappah Gazette" should be "Cuddapah Gazetteer" (p. 24), gram is a pulse not a grain (p. 53), and so on; the list of errors, too long for insertion here, creates an uneasy suspicion of faulty scholarship. On the other hand, Mr. Hatch is delightfully free from prejudice; he knows he "ought not to like rascals," but he frankly appreciates the Kuravar as a sportsman, a humorist and an artist at his job. F. J. RICHARDS.

India : History, Mookerji.

Asoka (Gaekwad Lectures). By Radhakumud Mookerji. Macmillan & Co., Ltd. Pp. xvi + 273, with 15 plates and map. Price 21s. net.

Asoka's conquest of Kalinga (Orissa) marks the zenith of the Maurya Dynasty, which arose in India on Alexander's death. and ruled from Afghanistan to Bengal, from Nepal to the borders of Mysore. Shocked with the horrors of war, Asoka turned pacifist and devoted his life to propaganda. But worlds are not saved by imperial decree; soon after his death his empire crumbled; his religion was subverted, his very name excluded from the annals of his country. Yet his edicts remain, scattered through the length and breadth of India, "graven in the rock for ever," amazing records of goodwill, of a simple code of conduct, the spirit of which is a living force in the India of to-day.

In the short space of 106 pages Dr. Mookerji discusses Asoka's early life, his administration, religion and monuments, and the history and social conditions of his reign. The rest of the book is taken up with texts and translations of Asoka's inscriptions, and appendices on their script, language and chronology. In his introduction Dr. Mookerji sketches concisely the steps by which these edicts have been retrieved from oblivion. Of each edict he gives one version, with copious annotations and references. The plates are well chosen, the printing excellent, the index full and clear. The work is intended as a text-book

for students, and, except in a few minor "has no pretensions to originality." It is a handy little volume that should serve its purpose well.

F. J. RICHARDS.

Tibet: Religion. Evans-Wentz. The Tibetan Book of the Dead. By W. Y. Evans-Wentz. 8³ in. × 5³ in. Pp. xliv + 248; 11 illustrations (including 5 of emblems, of which 2 are on the cover). Oxford University Press; London: Humphrey Milford. 1927.

This is a translation by a Tibetan lama (with an introduction and commentaries by the editor and a foreword by Sir John Woodroffe) of a version of the Tibetan Bardo Thödol, which describes after-death experiences in the intermediate state before rebirth, as understood by the Kargyutpa sect of the Red Hat school of Lamaism, and also contains the ritual appropriate to the circumstances. To students of this peculiarly evolved (or, if one prefers the expression, extremely debased) kind of Buddhism, it is a work of great interest, and it contains detailed descriptions of divinities which are of special value from the point of view of iconography and archæology. It is also, of course, of some importance as a contribution to folklore and the comparative study of religions.

The work of editing it has been well done, and there is a useful index. For the understanding of the document we are further aided by the esoteric interpretations of the translator, Lama Kazi Dawa-Samdup, which must be presumed to represent genuine native glosses on the text, and appear to be in harmony with the tenets of a school of thought that sees a mystic unity everywhere behind a phantasmagoria of phenomenal manifestations. I confess I am less satisfied with the editor's attempt to square some of these ideas with the results of European science. The two things are not in pari materia; and I doubt if their comparison helps one much towards the understanding of a treatise which, in my judgment, is more valuable as a textbook of a curious development of Buddhism than as a peg for the support of modern forms of occultism and the like.

C. O. BLAGDEN.

Papua : Ethnology. Landtman. The Kiwai Papuans of British New Guinea. By Gunnar Landtman. Macmillan & Co. Pp. 461-22-xxxix. Pls.

113. Price 30s.

In this book Dr. Landtman has published the valuable fruits of his two years' work in the region of Daudai and the estuary of the Fly river. He deals extensively

with the economic and ceremonial life of the people and shows, in his peculiarly interesting description of the ritual attendant upon such activities as agriculture and hunting, the way in which every undertaking which is of importance to the community has its ceremonial as well as its An interesting sociologpractical aspect. ical point also emerges from his account. It would appear that in matters concerning the community as a whole, such as the building of a man's house (darimo), or the planting of the people's staple food supply, yams and taro, an old couple represent all its members and perform the necessary ritual on behalf of all; whereas in matters of less general importance, which primarily concern the individual, every man (with the aid of his wife) is his own magician

and uses his own spells.

The light which Dr. Landtman has thrown on the position of women in Kiwai society is also very instructive. There is an ambivalent attitude towards them. On the one hand they are recognised as being of prime importance to the wellbeing of the community, for all magical power comes from them and their cooperation is therefore essential for gardening, hunting and fishing. This affects profoundly the relations of husband and wife and the author shows that it is at least partly on this account that constant attentions, in the way of gifts of food and respect, are paid by a boy to his mother and her kindred and by a man to his wife's people. On the other hand, there is the usual emphasis on sex dichotomy, expressed in the exclusion of women from the darimó, and, in certain conditions, such as pregnancy, a woman is definitely dangerous to both men and crops.

The social anthropologist will perhaps regret that Dr. Landtman did not give more space to the problems of the social relations of kindred. It would seem that, outside the family, the totemic clan is not the only, nor perhaps the most important, kinship unit. Smaller groups are mentioned, but their composition is never made The attitude of the people towards the marriage of all first cousins, and their customs concerning the ownership of land and goods, suggest that among them there is a considerable development of individualism and that genealogical relationship counts, on certain occasions, for more than clan membership.

His account of the inter-village and inter-tribal relations of the people both in war and in the exchange of goods is interesting. Here, as in Melanesia and elsewhere, there is a clear distinction between hostilities against a traditional foe and temporary antagonism towards

a normally friendly village. It is clear that to be a stranger was to be an enemy. Exchange of goods was carried on between friends and foes alike except during periods of actual fighting, and it is very significant that, even with traditional opponents, the fear of precluding the possibility of peace "put a marked restraint upon "hostile excesses." (215). This indicates that among these people gift-exchange was recognised as being of economic importance, while the ritual accompanying it expresses its social significance. present even in transactions which most closely resemble genuine barter and is to the fore in the ceremony of silently ex-changing food whereby hostile groups propose and accept a truce-a custom which Dr. Landtman rather misleadingly compares with the "silent trade."

The last part of the book is devoted mainly to an account of the beliefs concerning supernatural beings and of the rich ceremonial life of the people. He describes, with a wealth of detail which, however, never becomes burdensome, the annual rite commemorating the dead, the life-giving ceremony, and the fire-ceremony for driving away sickness (which also shows many features of a typical puberty initiation ceremony), as well as various fertility rites connected with men, gardens and

turtle.

Dr. Landtman has confined himself to pure description. He refrains from theorising either as to the meaning of those things which he recounts or as to the cultural affinities of his people to other New Guinea tribes. This last task has been undertaken by Dr. A. C. Haddon in a most illuminating introduction to the book, wherein he discusses more particularly the relations between the Kiwai tribes and the Marind Anim. Heralded by such a general survey this full ethnographic account of a people in this all too-little studied area is of inestimable value

CAMILLA H. WEDGWOOD.

Polynesia: Folklore. Andersen.

Myths and Legends of the Polynesians. By Johannes C. Andersen. With 16 plates in colour by R. Wallwork, 32 plates, other illustrations in the text, and a map. London: G. G. Harrap & Co. 1928. Price 21s.

In the heroic ages of Europe there was constant contact with various civilisations, with much borrowing of culture. Society was complex and metal-working provided efficient weapons as well as accourrements and ornaments. The racial mixtures and the differences in culture and ideals contributed to form a picture of barbaric magnificence. The heroic age of Polynesia

presents a very different picture. The Polynesians were a fairly homogeneous people, on practically a cultural level, and speaking one language with dialectic variations; they had no knowledge of pottery or metals. The population was estimated at the end of the eighteenth century at 1,290,000 and in 1922 at about 184,000. They were great navigators and ranged over an area of 14,000,000 square miles, though the inhabitable land was only about 9,600 square miles. It has been calculated from their oral records that their ancestors left India about the fourth or fifth century B.C., and after a short stay in Indonesia adventured into Oceania. Long voyages were accomplished, such as Europeans did not dare to undertake for many hundred years later; the first antarctic expedition seems to have been made about 650 A.D., and the tradition of this stimulated another voyager 300 years later to emulate his predecessor and see "the wonders of the ocean." These adventurous mariners were a cultured and poetical folk, with a jealously guarded aristocracy of ancient lineage and a class of priests and learned men. The Maori, and doubtless other branches, had regular schools of learning where tribal history was taught under scrupulous supervision. Mr. J. C. Andersen, a scholar of repute in Polynesian lore, has collected and synthesised in an admirable manner the scattered myths and legends, so that for the first time the European student has the means not only of learning about the myths and sagas of the Polynesians but of comparing them with those of Europe. Although the conditions were very different it will be found that there are striking analogies which point to something deeper than similar examples of romantic love, deeds of valour and chivalry, and the interference of the gods with the actions of mortals. Among the multiplicity of gods and hero-gods there was, at all events among the Maori-the more virile division of the Polynesian stock—a secret cult of Io, the Eternal, by whom all gods and men were made, who was entirely beneficent and had no connection with evil. "So tapu " was the thought of Io that even the " name was used only on rare occasions among the initiated . . . The people as a whole knew nothing at all of the cult of Io; it is doubtful if they even knew the name . . . Of most of the " myths there is an esoteric version and " the common or fireside version; it is the " latter with which most Europeans have " come in contact, but it is acquaintance " with the former that induces a high re-" spect for the Polynesian as a mystic and " a philosopher." Mr. Andersen makes

several suggestions regarding the equation of Polynesian with European mythology. The book is well and appropriately illustrated and the coloured plates are charming, A. C. HADDON

Mesopotamia: Archæology. Hal and Woolley.

Ur Excavations: Volume I, Al-'Ubaid ; a Report on the work carried out at Al-'Ubaid for the British Museum in 1919 and for the Joint Expedition in 1923-4. By H. R. Hall, M.B.E., D.Litt., F.B.A., Keeper of the Egyptian and Assyrian Antiquities in the British Museum, and C. Leonard Woolley, M.A., Director of the Joint Expedition. With Chapters by C. J. Gadd, M.A., Assistant in the Department of Egyptian and Assyrian Antiquities and Professor Sir Arthur Keith, M.D., F.R.S., Conservator of the Museum of the Royal College of Surgeons. Publications of the Joint Expedition of the British Museum and of the Museum of the University of Pennsylvania to Mesopotamia. Oxford: The University Press. 1927. Pp. xii + 244, 68 plates and 80

figures.

This sumptuous volume is the first of a series designed to record the results of the excavations carried on in Mesopotamia by the Joint Expeditions from London and Philadelphia, and is worthy of the discoveries of extraordinary importance made during the last few years by Dr. Hall, Mr. Woolley and their colleagues. volume deals with Tell al-Ubaid, they now spell it, a mound situated four miles to the west of Ur, at which were found a temple, raised to Nin-khursag by A-anni-padda, the second king of the First Dynasty of Ur, as well as a mass of fine painted pottery, associated with evidence of agriculture, such as sickles, querns and hoes, all of which belong to a much earlier date. Very full accounts are given of the excavation, as well as of the objects found, most of which have been illustrated, and the authors are to be congratulated on the thoroughness of their work.

In Chapter VII Mr. Gadd discusses the inscriptions, and from the style of the epigraphy is inclined to date the reign of A-anni-padda as preceding by two generations that of Ur-Nina at Lagash. It is well to remember, however, as Mr. Sidney Smith has recently reminded us, that such epigraphical arguments are not convincing, "for cuneiform writing " did not change speedily at any period, " and there is sometimes far more difference to be noted between individual scripts of the same period than between inscriptions centuries apart." Mr. Gadd assumes that it was the First Dynasty of Ur that was conquered by Eannatum; it is equally, if not more, probable that it was the Second.

Perhaps the part of the volume of the greatest interest to anthropologists Chapter X, on the Human Remains, by Sir Arthur Keith. The skulls have been measured and described by Sir Arthur with his usual care. There are only eight males and three females from the prehistoric cemetery at al-'Ubaid, but he has included in his report three males and four females from later graves at Ur; several of these skulls are too incomplete to be capable of yielding many measurements.

There is little variation in the lengths of these skulls, except that one of the male skulls from Ur is unusually long. In breadth, however, as Sir Arthur has pointed out, the later series are decidedly narrower than the earlier. This fact he interprets by suggesting that the primitive population more nearly resembled that found on the Iranian plateau, but that, before 1900 B.C., when the second series lived, there had been an infiltration from Arabia into Mesopotamia of Semitic tribes with narrower skulls. If this be the correct interpretation of the facts, Mr. Campbell Thompson's suggestion, from which Dr. Hall dissents, that the early al-'Ubaid people were closely allied to the Elamites, receives support from an unexpected quarter.

H. J. E. P.

CORRESPONDENCE.

Sociology. Richards. Age Organisation—Terminology.

To the Editor of MAN. SIR,-In supporting Prof. Radcliffe-Brown's protest against the misuse of the term "age-grade," I venture to suggest that his choice of the word "set" is un-fortunate. "Set," according to Webster, is apparently a corruption of "sect" or "sept"; in either case the connotation is wrong. "Group," which connotes "bunch" or

"cluster," is more appropriate; the Professor himself defines "age-set" as a "group," and the term "age-group," in the sense of age-set," is already in use (e.g., J. H. Mills, "The Ao Nagas," p. 177, as contrasted with S. C. Roy, "The Oraons," p. 215, where the word "grade" is, quite correctly, used).

The distinction between "group" "section" is not a mere verbal quibble; the words stand respectively for two funda-mentally different processes, "fusion" and "fission," by which society is "organised," and the loose use of these and kindred terms obscures the real nature of any social structure.

Yours faithfully, F. J. RICHARDS.

Mummification. Dawson. Mummification in Australia and in America.

To the Editor of MAN. Srx -In his letter published in the January issue of Man (No. 12) Mr. E. S. Thomas makes some comments on my recent article in the Journal with the above title. It is evident, however, that he is not conversant either with the literature of mummification nor with the details of its technique as revealed by the examination of actual mummies—a study on which I have been specially engaged for the last twelve years. If he considers that I have uttered "far too sweeping a generalisation" I think these words can be applied with equal force to his

If there is indeed such a widespread feeling of affection for the dead as a motive for preservation of the body as Mr. Thomas suggests, is it not strange that inhumation and cremation are far commoner than mummification?

The suggestion that artificial measures for the preservation of the body may have originated in the curing of meat, fish, etc., is not new. It was put forward more than

twelve years ago by Prof. Elliot Smith.

It is difficult to see how the operations of evisceration employed by embalmers can ever have been applied to food animals. Carcasses for food were necessarily cut in pieces, whereas the embalmer, in removing the internal organs, was careful to preserve the exterior integrity of the corpse. It was for this reason that the viscera were removed either per anum or by a flank incision. The latter method was an operation of extreme difficulty, as any one with even a slight knowledge of anatomy can appreciate. There would be no object whatever in treating foodcarcasses in this way.

The special precautions for the preservation of the nails were rendered necessary in Egypt in consequence of the protracted maceration of the body in a jar of saline solution that loosened the whole of the epidermis; but the same arbitrary method of treating the nails can be seen in mummies from the Canary Islands, from certain parts of America and elsewhere where the salting process was not employed and there was consequently no need whatever to preserve a thimble of epidermis on the fingers and toes nor to tie on the nails with thread.

I am, of course, well aware that red colour had a funerary significance in the Upper Palæolithic Age, but Mr. Thomas is evidently not aware that mummies were not painted red in Egypt until the time of the Twentyfirst Dynasty, when the art of embalming was already nearly two thousand years old, and that the introduction of red paint in mummification was made at the same time as that of

artificial eyes, packing the trunk and limbs. and of other innovations that characterise mummies of that period. It is precisely the distinctive features of Egyptian Twenty-first Dynasty technique that make their appearance in other parts of the world. These "relatively modern burial customs" are thus significant.

The paper by me on which Mr. Thomas comments deals only with Australia and America. In previous memoirs on mummification I have on several occasions discussed these points in greater detail. Yours faithfully

WARREN R. DAWSON.

Archæology'. Wayland. The Problem of the Pre-Chellean Industries.

To the Editor of MAN. SIR,—Having read with great interest Mr. Vulliamy's article under the above heading (Man, No. 2, January, 1929) I would like to be permitted to remark upon two

The fact that an object claimed as the work of early man can have had no apparent purpose (to us) is not a convincing argument against its "humanity." If it were so, certain pigmy tools would have been discredited years ago; and, on the other hand, the rostro-carinate is surely not perfectly useless for any conceivable purpose.

I am not concerned, at this juncture, to uphold or refute the "humanity" of Mr. Reid Moir's "pre-Chellean industries." I have too small a practical knowledge of them for that—but I would like to point out that in so far as the rostro-carinate is concerned quite unquestionable tools of this type occur in association with coup-de-poing, tortoise cores and flake tools of the Sangoan industry of Uganda. A fairly representative collection of Sangoan tools was sent some time ago to the University Museum of Ethnology and Archeology at Cambridge, where, no doubt, they may be inspected. Whether Mr. Reid Moir's rostro-carinates exhibit a "tech-nique" similar to that of the Sangoan examples I am unwilling to say without an opportunity for detailed comparison, but rostro-carinates the latter certainly are, and they must have had a use, although its exact nature is no more and no less apparent than is that of the supposed pre-Chellean tools, E. J. WAYLAND,

Ireland : Archæology. Moir: Burchell. The Implements of Sligo, Ireland.

To the Editor of MAN. SIR,-We have read the statements of Messrs. Charlesworth and Macalister in MAN (Jan. 1929), and, as we are unable to recognise, in them, any new facts relevant to the Sligo controversy, we do not consider that it is necessary for us to formulate a reply. In company with Mr. Ernest Dixon, we have now made public our views on the Sligo discovery before the Society of Anti-quaries of London, and if, when the paper

embodying these opinions, is published in Archæologia, our opponents are able, and care to attack our conclusions with arguments of scientific value, we shall endeavour to of science.

Meet them.

Yours faithfully,

J. REID MOIR,

J. P. T. BURCHELL,

To the Editor of Man. Sin,—Though I had not intended to write again on this subject, I may permit myself a postscript to my last letter, suggested by the communication of Prof. Sollas. To form a judgment on Mr. Burchell's "Palæoliths," it is essential to undergo the illuminating experience of reading Messrs. Moir and Burchell's Memoirs on the spot; and to study the sites with a mind open to the stark absurdity of imagining that Paleolithic remains could possibly be found there. Not one of such of Mr. Burchell's supporters as need to be taken seriously seems to have done this. Mr. Dixon is no real exception, for he makes it clear that he is content to accept the judgment of others on the authenticity of the "implements"; and, indeed, he puts the cart before the horse by making the geology of the problem dependent on the postulated archæology. (It is instructive to note that Prof. Breuil does the exact contrary, so that his verdict and that of Mr. Dixon virtually cancel each other out). It is no paradox to claim as a vote for the opposition every favourable testimony based upon the alleged criteria of human workmanship alone criteria which at best are merely a priori assumptions, the validity of which no one has ever proved. For, the greater the number of such testimonies, the more complete is the exposure of the mischievously deceptive nature of those criteria, and the worthlessness of ALL conclusions, regarding early man and his handiworks that may be based upon them. R. A. S. MACALISTER.

To the Editor of Man.
Sin-It cannot with truth be denied that the original specimens found by me incorporated in beach material on Coney Island were flaked in a grand manner, a manner to be compared with that demonstrated upon the massive flakes and flakeimplements discovered by Mr. Reid Moir on certain factory sites situated at the base of the Cromer Forest Bed in Norfolk. With this opinion Mr. Moir, himself, concurred. As my investigations in the Sligo area proceeded, however, a comprehensive series of flakes. implements and cores was being accumulated, with the result that any cultural affinity I had originally detected between the Sligo and Cromer Forest Bed industries was fast diminishing when the two series were examined typologically. Instead, it was becoming cor-respondingly clear that the Sligo artifacts should, in so far as technique was concerned, be correlated with an industry, discovered by Mr. Moir, in the Inter-glacial Gravels of the Norfolk coastal sections, whose age is Early Mousterian. Now these gravels

rest upon the Contorted Drift and Cromer Tills and so must be regarded as being younger than the Older Drift.

Stratified finds, similar to those from Coney Island and Rosses Point, were found by me, in situ, at the base of the Lower Boulder Clay of the Sligo area. Out of consideration for the teaching of the orthodox geologist I felt bound to regard the Lower Boulder Clay of the Sligo area as representing the equivalent to the Older Drift of East Anglia; with the attendant result that I had to place the Sligo artifacts as of Cromer Forest Bed age, at the latest, and this in spite of marked typological differences.

Upon making a study of the literature dealing with the geology of Ireland I formed the opinion that these conclusions were incorrect. Messrs. Cole and Hallissy, in their admirable paper in the Geological Magazine, 1914, pp. 498-509, press very strongly in favour of an interglacial period occurring between the deposition of the Shelly Basement Boulder Clay of the east of Ireland and the deposition of the boulder clay of the Ivernian ice-sheet, i.e., Lower Boulder Clay of Sligo. So soon as I apply the views expressed by Messrs. Cole and Hallissy to the results I have obtained in the Sligo area my evidence coincides, both upon geological as well as upon archæological grounds, with that recorded by Mr. Reid Moir from the coastal sections of East Anglia. It is not to be wondered at if I then entertain the gravest doubts as to the correctness of the views expounded by the academic geologist and determine to pursue the clues which Mr. Blake Whelan and myself have discovered towards establishing an inter-glacial period between the deposition of the Lower and Upper Boulder Clays of the Sligo area.

The correct dating of the Lower Boulder Clay of Sligo is the key to the age of the Sligo artifacts and as the Abbé Breuil has justly said, it is for Geology to assign them to their proper period. In the meanwhile it is to be hoped that Archeology has furnished a lead in the right direction in the matter.
J. P. T. BURCHELL.

Crawford. Archæology. Archæological Books published on the Continent.

To the Editor of MAN. SIR,-Mr. Burkitt comments, in the last number of Man, on the paucity or absence of British reviews of a recent book dealing with Brittany. I suspect that I know the reason. Continental publishers often refuse, when asked by editors, to supply review copies, or demand payment for them. This policy is, I think, short-sighted. There are many people in this country who read French books on archwology who are, presumably, potential buyers. The publicity of a review, therefore, might result in sales. It might also in some instances have a chastening effect, and thus, in the course of time, raise the national standard of French archæological efficiency to a level with our own.

Yours faithfully, O. G. S. CRAWFORD.



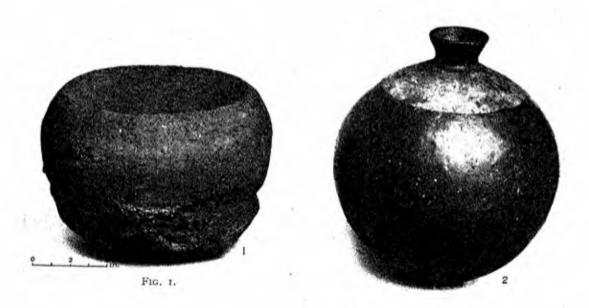
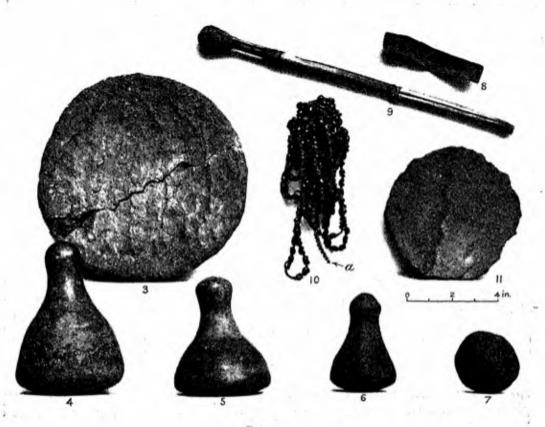


Fig. 2.



 $${\rm Fig.}$ 3. The potters of sokoto.

ORIGINAL ARTICLES.

With Plate C.

Africa, West: Technology.

Nicholson.

The Potters of Sokoto, N. Nigeria. By W. E. Nicholson. (With Plate C.)

34

Pottery is made in two quarters of Sokoto, by the Adarawa* and by the Zorumawa.† The former work chiefly in one spot, near the old market; the latter in another quarter to the west of the town.

Adarawa.—The Adarawa manufacture the following different articles of carthenware (see Fig. 1, i-x):—

 (i) pot for carrying water (Hausa, tulu); a pot manufactured in this way is also adapted to form a lamp-guard;

(ii) shallow hemispherical pot, kwatarni (a); an adaptation of this is the earthenware hearth,

(iii) small water container for drinking and purificatory purposes, shantali;

(iv) large water container, randa; and cooking pot, similar in shape but smaller, tukuniya;

(v) drain pipe for use as gutter spout, indororo(Fig. 5);

(vi) stand for calabash of food, kaskon gidauniya; a smaller specimen of the same shape is fitted with a lid and used for storing kola nuts;

(vii) lamp, fitilla (see also Fig. 6);

(viii) pot for cooking ground-nut cakes, kaskon i, Tulu. ii, a, Kwatarni. masa;

Murufu. iii, Shantali, iv,

- (ix) frying pan, kaskon sinasar;
- (x) ink bottle, gidan tadawa;

(xi) earthenware toys and armlets.



VII. S. I.—ADARAWA POTTERY, SOKOTO.

i, Tulu. ii, a, Kwatarni. ii, b. Murufu. iii, Shantali, iv, Randa and Tukuniya. vi, Kaskon Gidauniya. vii, Fitilla. viii, Kaskon Masa. ix, Kaskon Sinasar. x, Gidan Tadawa.

Some of these articles are made by men, some by women and some by both sexes, but the distinction is merely a question of craft practice, not of tabu.

According to their own account the Adarawa were free immigrants at the time of the foundation of Sokoto (the beginning of the nineteenth century), and brought their technique with them from Adar.

The actual manufacture of the pots is confined almost entirely to one place, but some of the workers live at a distance therefrom. No special social status attaches to them qua potters, and apprenticeship is not entirely confined to the potters' families; outsiders may be allowed to learn the trade and are fed by the potters in return for their labour until they become efficient. There are no tabus in Sokoto itself; but it is said that in Argungu (Kebbi) and Anka (Zanfara) offerings of cotton and of millet dough are taken to the place where the clay is dug. In Sokoto—again as a question of practice, not of tabu—a potter does not allow his hands to touch oil when the neck of a pot is being put on; if he does, the job is weakened.

Preparation of Clay.—The clay is dug in the vicinity of the banks of the Sokoto river, and is carried—sometimes on donkeys, sometimes on men's heads—

^{*} Adarawa are of Berber extraction; their country is north of Sokoto.

[†] Zorumawa are of hybrid Fulani and Mandingo extraction, and immigrated from the west.

in lumps to the potters' compounds, where it is stored in huts to be used as required. Sometimes the clay is purchased by the potters, e.g., at a penny for 60 lbs. There is no season regarded as specially favourable for obtaining the clay, but in practice the floods hinder its collection in the months of July and August. The clay is levigated in two ways. In the case of Nos. (i) tulu, (ii) kwatarni, (iv) tukuniya (but not randa), (v) drain pipe, (viii) kaskon masa, (ix) kaskon sinasar—millet chaff is added to the clay, but care is taken that no bean or grain of corn gets into it or a hole in the finished article will result. In the case of the others, Nos. (iii) shantali, (vi) kaskon gidauniya, (vii) fitilla, (x) ink bottle, (xi) toys-the clay is levigated by the addition of sifted earth or sand, and no chaff is used. The large pot (randa) is a special case; old potsherds are ground up and added to the clay with which it is made.

Products; tulu.—The most interesting branch of the industry is the making of pots for carrying water (tuluna). This is a very important matter in Sokoto, where water has often to be carried a mile or more; the normal price of a tulu-ful of water in the town is a halfpenny. The tulu itself is a small-mouthed spherical pot holding about 31 gallons—a convenient load for an adult woman; but smaller pots are made for little girls, in order that all available labour in a household may be utilised. Men, women and boys make these pots, and the finished article is admirably adapted for its purpose, cheap and well made

(Plate C, Fig. 2).

Building of the Pot.—There are four stages in the building of the pot, and the workman deals with a large quantity of pots in each stage before proceeding to the next.

Body of the Pot .- (i) To make the body of the pot the potter uses a clay mould, the base of which is fixed in the earth with the upper face inclined slightly towards him (Plate C, Fig. 1). This upper face has a hollow in the centre, which fits roughly the outside curve of a finished pot. The potter sits on the ground facing the mould, with a leg on either side of it. The clay is divided into "pancakes," about 10 inches across and 11 inches thick, each containing the amount of clay estimated to be necessary for a complete pot less the mouth (Plate C, Fig. 3, 3.). The potter takes one of these "pancakes," places it on the mould, and proceeds to shape it into the form of a pot by beating it with a clay handbeater or pestle in a way somewhat similar to that in which a metal worker beats a piece of copper into a bowl (Fig. 2). The pestles are of different sizes, the smaller and lighter ones being used as the clay approaches its final shape; their form resembles rather the iron head of the "rammer" used by the navvies in England to beat down loose earth, with a convex face and a grip at the top to fit a man's hand (Plate C, Figs. 3, 4-6). Wood or cornstalk ashes are used between the mould and the clay to prevent sticking. The clay is gradually beaten out into a hollow sphere with walls about 1 inch thick, and a circular orifice about 2 inches in diameter is left at the top. The beating goes on until the hole becomes too small to admit even the smallest type of pestle, and then the final touches are given by pressing the pot wall into the mould with the fingers. During the whole process the pot is turned round and round continually in the mould; in fact, towards the end the bottom of the pot is turned uppermost on the side away from the workman. Should it appear likely that the amount of clay in the original "pancake" will be insufficient, a ball of fresh clay may be thrown into the centre of the half-beaten pot and beaten out into a homogeneous mass with the growing pot wall. If it is required to make any small repair after the pot is nearly finished, a piece of millet stalk about 15 inches long is used with a blob of dried clay affixed to the bottom end (Plate C, Fig. 3, 9). This instrument is inserted at the neck opening, and any dent in the pot wall knocked out against the

mould. The result of the process is to produce a very true shape of great strength, and with the greatest possible economy of material. Smoothness of surface is obtained by the friction between the clay and the mould as the pot is turned over and over, with the wood ashes between the two sur-

faces. At this stage the pot is set on its side to dry.

Mouth of the Pot .- As soon as the pot is strong enough for the next stage, the potter selects a lump of clay like a dough nut (Plate C, Fig. 3, 7), with a central depression made by his thumb, wets the edges of the small orifice left in the pot, and sticks the plum of clay thereon. He sets the bottom of the pot in a potsherd of baked clay -usually a fragment of a broken finished pot (Plate C, Fig. 3, 11). He holds the potsherd on the flat of his left hand and spins it with his thumb and fingers, thereby imparting a regular rotary motion to the pot, i.e., to all intents and purposes the pot rotates freely in the hand. In the meantime, as the pot rotates he shapes the mouthpiece with the thumb and first two fingers of his right hand (Fig. 3). When it has attained the requisite shape, he takes a strip of soft tanned goat-skin about 11 inches



Fig. 2.

wide and 6 inches long (Plate C, Fig. 3, 8), wets it, places it over the edge of the mouth, half inside and half out; then, with the first two fingers of his right hand inside the pot-mouth and his thumb outside, he spins the pot again in his left hand and so imparts the "finish" to the mouth. The pot is then set aside once more to dry.

Decoration.—A standard decoration is placed on every pot just below the neck for about 3 inches all round. Before the pot is quite dry, a piece of string doubled, twisted and knotted, in length about the breadth of a hand (Plate C, Fig. 3, 10a), is rolled round the pot with the palm of the hand, and leaves more or

less regular impressions.

The Wash.—The pot is then washed with a solution of red earth and water applied with a piece of rag. The earth is found near Sokoto, and is called locally

gargari. After the application of the wash the pot is polished by being rubbed with a string of seeds of the baobab tree (Plate C, Fig. 3, 10).

An alternative wash (kyelo) is used sometimes in the case of other articles of pottery, but never in the case of the tulu. This is brought into Sokoto from the south-west and purchased by the potters. The result is a brownish sheen, due, I think, to minute fragments of mica in the earth. It is applied in the same way as the red wash, but no polishing with baobab seeds takes place.

Burning.—When the pot is completely dry, it is ready for burning. The potters usually burn twice a week in Sokoto, on the evenings before market days. They use a circular uncovered "kiln," about 14 feet in diameter and consisting of a low mud wall 3 feet high. Holes are left in the wall to act as flues. In the course of erection the wall is bound round with grass rope plastered with mud to



Frg. 3.

prevent cracking. The pots are piled in the kiln in layers one above another, each pot being laid on its side, i.e., with the mouth directed horizontally. Each of the bottom layer of pots is chocked up on three stones with a crock between every stone and the wall of the pot. The outermost ring is made of old pots or failures from a previous burning, their mouths facing outwards; a stone is placed in the mouth of each to keep it from touching the wall of the kiln. The pots are not bound or "supported" in any way individually. When the pile of pots, which reaches sometimes a height of 7 feet in the centre, is complete, it is covered over with grass and the grass is lighted, while cornstalks are pushed in through the flues in the bottom of the kiln. The pots are burnt for about fifty minutes, and

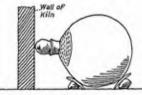


FIG. 4.

are not burnished in any way after burning. Next day they are ready for market if necessary, but considerable stocks are held by the potters themselves. The price

of the completed pot is 1½d.

An ingenious lamp-guard is made out of the tulu

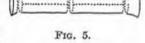
by cutting a circular hole in the bottom (before the pot is "washed") large enough to admit a native oil lamp, i.e., say, 5 inches across, and by making

triangular, round and oblong perforations all over the wall of the pot, which is then washed with kyelo and burnt in the usual way. After the lamp has been lighted the guard is placed over it, with the mouth pointing vertically upwards.

Kwatarni.—Men and women manufacture the kwatarni (Fig. 1 (iia)), a hemispherical bowl. To make it, an upturned pot of a size to suit the desired internal radius of the kwatarni is used. A "pancake" of clay is taken, just as in the case of the tulu, and is beaten out with a stone first and then with a handbeater of clay over this upturned pot. Of course, in this case the blows of the beater fall on the convex surface of the pot, and not on its interior as in the case of the tulu. The kwatarni is "washed" inside and outside,

and is lightly polished with baobab seeds on the inside only.

The Murufu (Fig. 1 (iib)), an earthenware hearth for cooking, is made (by men) by adding three feet, or else a rim to act as a stand, to the kwatarni and cutting a



hole in the side of it for the admission of fuel; suitable rests are added inside for the cooking pot to stand on.

Shantali.—The shantali, or small water container (Fig. 1 (iii), is made usually, but not invariably, by women; so far as the bottom portion is concerned, the method employed is the same as that used in the case of the kwatarni; the upper portion, consisting of mouth and handle, is then added by hand. Actually, there are at least three varieties of shape, of which the drawing shows the most typical.

Randa; Tukuniya.—The randa and tukuniya are the same in form, but the former is a large pot for holding water and the latter a small variety for cooking



Fig. 6.

(Fig. 1 (iv)). They are made in the same way as the kwatarni by both men and women. In the case of the randa only ground potsherds are added to the clay.

Indororo.—The indororo is a drain pipe which is used in Sokoto as a "spout" to drain the water off flat-roofed houses. It consists of a cylinder about 3 feet long and 4 inches diameter, with a "mouth" at each end, one mouth being rather

smaller than the other. It is reckoned a difficult article to make, and only men attempt it. It is made in two halves (Fig. 5). First, a lump of clay is beaten out into a flat piece of the requisite thickness, about 18 inches long and a foot wide; this is then lifted up on end and the two sides joined together, so that a cylinder 18 inches long results. Two of these are made and then joined to make a cylinder 3 feet long. The core of a maize "corn cob" is wetted and rubbed on the joints to seal them. Also the outside of the pipe is beaten gently with a small piece of stick.

Then a large "mouth" is put on at one end and a small "mouth" at the other. This is done by taking a lump of clay, putting it on the end of the cylinder, and walking round it with a piece of leather held over the edge (cf. the method of putting on the mouth of a tulu).

The pipe is washed and polished outside only, except at the ends or "mouths,"

where it is polished both inside and out.

Kaskon Gidauniya.—The kaskon gidauniya (Fig. 1 (vi)) is a stand on which a calabash of fura, i.e., boiled flour and sour milk, is placed before eating; a smaller specimen of the same shape is fitted with a lid and used for storing kola nuts. The method of manufacture is the same as that for the kwatarni.

Fitilla.—The oil lamp, fitilla (Fig. 1 (vii)), is made by women. The maker first rolls a lump of clay between the hands to make the stem; then she takes a second lump of clay of suitable size, makes a dent therein by jabbing it on the point of her elbow, and fits one end of the stem into the dent (Fig. 6 (i)). She then turns the stem in one hand and forms the second lump of clay into a cup-shape with the fingers of the other hand, and trims the edge of the cup with a knife (Fig. 6 (ii)). When the result is dry, she puts the other end on to it in the same way (Fig. 6 (iii)). The lamp is finally washed, usually with kyelo.

Kaskon Masa.—The kaskon masa is a pot in which ground nut cakes are baked (Fig. 1 (viii)). Three small vertical holes are made in the rim and skewers of meat may be set in these to cook at the same time. It is manufactured by women in the same way as a kwatarni. It is "washed" and polished inside, but

"washed" only outside.

Kaskon Sinasar.—The earthenware frying-pan, kaskon sinasar, is used in wealthy establishments for frying a mess of eggs (Fig. 1 (ix)). It is made by men. To make it the potter places a lump of clay on a fragment of mat woven from split palm leaves or grass, and moulds the clay into the required shape with his

hands. The completed article is "washed" only, not polished.

Gidan Tadawa.—The ink bottle, gidan tadawa, has a large container for black ink and a smaller for red (Fig. 1 (x)). It is manufactured by men. The large vessel is made first by moulding the clay with the hands and "tapping it up" gently with a stick (cf. the case of the indororo or drain pipe); the smaller vessel is added and shaped by moulding the clay round a stalk of gumba grass. These ink bottles are "washed" but not polished, and are not burnt in a kiln, but placed in a heap of chaff which is set on fire. More chaff is added as required.

Toys, Armlets.—Toys and clay armlets (made by men) are moulded with the hands; the armlets are "washed" and polished, the toys "washed" only. The latter consist of conventional horses (with three legs), conventional maidens and little stools and bowls. They are burnt in chaff in the same way as the ink bottles.

W. E. NICHOLSON.

DESCRIPTION OF PLATE.

Adarawa waterpot, and implements used in its manufacture.

Fig. 1. Clay mould. Fig. 2. Water pot (tulu). Fig. 3, 3 Clay "pancakes." 4-6. Clay pestles. 7. Lump of clay for mouthpiece. 8. Tanned goat-skin. 9. Repairing instrument. 10. String of baobab seeds for polishing. 10a. String for impressing pattern. 11. Potsherd for spinning pot.

DESCRIPTION OF TEXT FIGURES.

Fig. 1. Adarawa pottery, Sokoto. (i) tulu; (iia). kwatarni; (iib) murufu; (iii) shantali; (iv) randa and tukuniya; (vi) kaskon gidauniya; (vii) fitilla; (viii) kaskon masa; (ix) kaskon sinasar. (x) gidan tadawa. Fig. 2. The half-formed pot (tulu) in the mould with the potter's right hand holding the beater inside. Immediately below the pot, in the foreground, is a "crock" used for spinning the pot when putting on the mouth. In the background at the extreme left corner are specimens of drain pipes leaning against the compound wall. Just under the potter's right arm can be seen a mould which has not been set in the ground.

Fig. 3. Putting the mouthpiece on the pot. Underneath the pot is the "crock" supported by the left hand of the potter, which imparts the spinning motion to the pot. Fig. 4. Method of laying pot in the kiln. Fig. 5. Method of manufacturing indororo. Fig. 6. Method of manufacturing fitilla.

Melanesia : Sociology.

Radcliffe-Brown.

A Further Note on Ambrym. By A. R. Radcliffe-Brown, M.A.

In my note in the Journal (Vol. LVII) on Deacon's discovery of a class system in Ambrym I pointed out (p. 347) that the system as described by Deacon suggested the possible existence of patrilineal clans. Professor Barnard's note in Man (1928, 103) has reminded me that Rivers wrote on Ambrym, and looking up his paper in the Journal (Vol. XLV, 1915) I find that he stated that the Ambrym society was based on patrilineal exogamous village groups, which must be in fact local clans. My surmise is, therefore, justified without need, perhaps, of further field investigation, and the class system as a combination of a matrilineal dual division and patrilineal local clans becomes easily comprehensible.

Barnard asks how it was that Rivers failed to find the six-class system in Ambrym. As a matter of fact he did, apparently, find it in North Pentecost. John Pantutum gave him an account of it which is to be found on page 190 of Vol. I of the "History of Melanesian Society." The two matrilineal moieties called tavalui are

divided each into three verana.

I think that probably the reason why Rivers failed to get at the Ambrym system was because he had never quite rid himself of the misconceptions that cluster round the use of the terms matrilineal and patrilineal, or mother-right and father-right. These misconceptions have created a lot of confusion not only in theory but also in field-work. Rivers explains (Journal, XLV, 229) that on his theories he expected to find in Ambrym a matrilineal dual division. In this he was right, for it was there in the batutun of Deacon. His first enquiries showed him the existence of patrilineal local clans. He thereupon gave up looking for the matrilineal dual division, because, perhaps unconsciously, he assumed that the two forms of organisation could not exist in the same people. Consequently when he did find traces of the social importance of matrilineal kinship he regarded them as survivals from an earlier form of social organisation. He affords, therefore, another example of how the old confusions about matriliny and patriliny can mislead an able field-worker.

It is worth while trying to make the nature of this confusion a little more clear. The late Sidney Hartland used to write about tribes where kinship is traced through females only. On any definition of kinship that is at all satisfactory there are no such tribes. Kinship is genealogical relationship recognised for social purposes and made the basis of the customary regulation of social relations. Genealogical relationships arise from the family and depend on the family, and the relations created by the family are not identical with physiological relations. (There is no kinship between a man and his illegitimate child but there is between him and his adopted child.) In every society of which we have any knowledge kinship is traced through both males and females. A person is kin to his sister's children as to his brother's children, to his father's brother as well as to his mother's brother. Kinship, as the saying is, is always bilateral.*

Where the unilateral principle comes in is where kinship through females in some societies, or through males in others, is given more importance for social purposes. What is necessarily and always unilateral is descent, *i.e.*, the entrance

^{*} How even the acutest thinker may be misled by customary phrases is seen when we find Malinowski writing ("Sex and Repression in Savage Society," p. 9): "These natives are "matrilineal, that is, they live in a social order in which kinship is reckoned through females only." For "kinship" read "descent."

of an individual into a certain social group as being the child of a member of the group. So that wherever we find descent groups such as clans, such groups must follow a single line of descent and be either patrilineal or matrilineal.*

When we examine a large number of forms of social organisation in different parts of the world we find that some have no descent groups (Andamans, Eskimo), some have patrilineal descent groups, some have matrilineal descent groups and others have two sets of descent groups, one patrilineal and the other matrilineal. To the last class belong the people of Ambrym, but they are not by any means alone, nor can they be regarded as abnormal or anomalous. Perhaps the earliest clear record of such a society was that of the Ovaherero, which has been known to anthropologists for many years. One of the more recently discovered instances is afforded by the Ashanti, and we have reason to suspect that similar double clan systems will be found, when carefully looked for, in many of the tribes of West Africa that lie between the Herero and the Ashanti.

Apparently, in spite of all the criticism raised against it, the old theory that matrilineal descent groups are in some not clearly defined sense more " primitive " than patrilineal descent groups still survives in the minds of many anthropologists. The great advantage of this hypothesis is that it can never be disproved. If we find in a society with patrilineal descent great importance attached to kinship through the mother this is supposed to result from the former existence of matrilineal descent. If, on the contrary, in a society with matrilineal descent we find importance attached to kinship through the father, this is interpreted as the beginning of the change from one mode of descent to the other. If we find two sets of descent groups, matrilineal and patrilineal, this can be regarded as an intermediate or transitional condition. Whatever condition we find can always be fitted to the theory. Of course, we could equally well fit the facts to a theory that patrilineal descent is everywhere more primitive than matrilineal. The only apparent objection to this seems to be that the peoples of Europe in historic times have had patrilineal descent. But if the Iroquois or the Nayar can be regarded as more primitive than the aborigines of Western Australia, then I can see no reason for not regarding the Romans as more primitive than the Iroquois.

However, the disadvantage of a thesis that cannot be disproved is that it can equally never be proved. The hypothesis of the historical priority of matrilineal descent is a speculation that has served and can serve no useful purpose to science. On the contrary, it has been harmful. Its harmfulness is seen in the way in which it has led observers into confusion that they might have avoided if it had not been present in their minds, influencing their assumptions and their observations.

The confusion of thought to which this theory gave rise, and which still seems to survive in the minds of some of those who do not hold the theory itself, is that of regarding societies as being necessarily either definitely patrilineal or definitely matrilineal. Kinship and descent are confused with one another, and it is assumed that if a society has matrilineal descent groups it will not attach importance to kinship through males, and inversely. This assumption is constantly being falsified by field research whenever it is thoroughly carried out. For example, in a people like the Crow, with matrilineal clans, it appears that the father's clan plays almost as important a part in a man's life as his own, i.e., his mother's clan. Innumerable similar examples can be found. Yet anthropologists, having decided that societies must be simply classified into two groups, matrilineal and patrilineal, are constantly surprised at any new tribe that is discovered to attach about equal importance to kinship through males and through females. Instead of abandoning their false

^{*} I, therefore, think that Mrs. Seligman's terminology in speaking of "bilateral descent" is unsatisfactory. Apparently what she means is the combination of matrilineal descent groups with patrilineal descent groups in one social system.

classification they try to fit these (to them) anomalous cases, i.e., the majority of human societies, into the classification as well as they can.

The old-fashioned way (Sidney Hartland), as we have seen, was to regard them as representing intermediate stages in a transition from mother-right to father-right. This is now out of fashion. It has been dubbed (for some quaint reason) "evolutionary," and has been discredited. The great discovery has been made that cultures do not exist and develop in isolation but act and react upon one another. (From some of the literature that comes to me I am led to believe that this obvious fact was never recognised by anthropologists till about seventeen years ago.) So the new-fashioned way of viewing the matter is to regard societies where kinship in both lines is socially important as having resulted from a matrilineal society having been influenced by a patrilineal one or vice versa. The old "evolutionary" theories have been replaced by a conception of an original matriarchal culture and an original patriarchal culture, distinct from the beginning of things, spreading over the world through Africa, Oceania, America (Frobenius, Schmidt). This is the old confusion in a new form.

The way this confusion acts in preventing us from seeing the facts as they are may be illustrated from Australia. The old evolutionists and the new diffusionists alike classify Australian tribes as matrilineal or patrilineal. We are told that many of the tribes of South-east Australia are matrilineal, and on that epithet whole hypothetical constructions are based and the facts are ignored. The facts are that in these tribes there are matrilineal moieties and matrilineal totemic clans, but there are also, wherever the system of four sections obtains, recognised though unnamed patrilineal moieties, and the strictly patrilineal local groups are at least of equal importance with the totemic clans in the regulation of the social life as a whole. On the other hand, in the tribes of Western Australia the patrilineal local group is also the totemic group, but kinship through the mother is only slightly less important than in the so-called matrilineal tribes of the East. Between the two we get the Dieri, one of the so-called matrilineal tribes, which has a double system of totemism, one set of matrilineal totems, and one set of patrilineal.

If we gave up applying the terms matrilineal and patrilineal to societies and confined them to institutions (descent, inheritance, succession) we should perhaps think a little more clearly, and we should not let these words and the preconceived

theories attaching to them prevent us from seeing the facts as they are.

Since kinship results from the family, and in the family every child has both a father and a mother and is therefore connected with both the father's family and the mother's family, it would seem to be the normal thing in any human society that social recognition should be given to both paternal and maternal kinship, and this is what we do find universally. The problem really is to explain why some societies emphasise kinship in one line at the expense of the other. Why, for instance, do the Zulu give less value in their social system to kinship through the mother than the Basuto?

There are at present two different and opposing tendencies in the study of culture. One view, by far the most popular, regards culture purely from the historical point of view and attempts, in the absence of any historical records, to multiply and elaborate hypothetical reconstructions of an unknown past. This is the method followed by Morgan, Elliot Smith, Hartland, Schmidt, Frobenius, and many American writers. However much these writers seem to differ from one another they all agree in treating the facts of culture as being primarily, if not entirely, material to be used in the making of conjectural history. The other tendency, best represented in England by Malinowski, is to treat each culture as a functionally interrelated system and to endeavour to discover the general laws of function for

human society as a whole. It does not neglect the historical point of view, but regards the processes of social change as something to be studied by actual observation over a period, or by the use of authentic and detailed records. It does

not reject history, but only hypothetical history.

This is not the place in which to discuss the claims of these two opposing methods. All that concerns us here is their respective influence on field-work. I have been concerned to point out that theories do influence observation, and the instance of Rivers in Ambrym is a case in point. I have been led gradually to the opinion that theories of the form of conjectural history, whether "evolutionary" or "diffusionist," exert a very pernicious influence on the work of the field-ethnologist. It is true that I have quoted only one instance. But I could refer to many others. On the contrary the functional point of view, since it leads the anthropologist always to study the interrelations of the different elements of a culture, tends to make field observation more thorough and systematic.

I believe that at this time the really important conflict in anthropological studies is not that between the "evolutionists" and the "diffusionists," nor between the various schools of "diffusionists," but between conjectural history on the one side

and the functional study of society on the other.

A. R. RADCLIFFE-BROWN.

Britain: Archæology.

Parsons.

A Round Barrow at St. Margaret's Bay. By Prof. F. G. Parsons, F.S.A.

In 1920 some remarks were made in the daily press about a mound which had been excavated in the garden of Sir Johnston Forbes Robertson at St. Margaret's Bay in Kent, and in which some skeletons were found.

I was interested in it at the time because a few years before I had helped in the excavation of another circular burial place in the grounds of Valetta House, Broadstairs, in which the skeletons of Beaker Folk were found with Saxons buried above them (see Journ. R. Anthrop. Inst., Vol. 43.) I was told, however, by a friend that all the bones had been reburied and that the owners of the property were

anxious to have as little said about the matter as possible.

During this summer Sir Johnston Forbes Robertson wrote to Sir Arthur Keith, telling him about the tumulus, and sending him two skulls taken from it. One of these Sir Arthur and I regarded as a typical Saxon skull, but the other we thought might well have belonged to a Beaker Folk woman. It was settled, therefore, that I should go to St. Margaret's Bay, where I found Sir Johnston ready to give me all the help in his power, and I gathered from him that the reason he had delayed communicating with any anthropologist was the very natural one that he found his house was earning the reputation of being haunted and he feared that no servants would stay in it.

The barrow, which was marked on the Ordnance map, had been partly removed to make a tennis court, but enough of it was left to enable me to estimate that it must have been about 25 yards in diameter (the one at Broadstairs was 27 yards).

Sir Johnston told me that, in removing the soil, the workmen had come across six skeletons lying on their backs, in the extended position, and that it was to two of these that the skulls which he had sent to Sir Arthur Keith belonged; but on a deeper level another skeleton was found in a crouched position, which, unfortunately, was reburied. Since only part of the barrow has been removed it is possible that other crouched skeletons, presumably of Beaker Folk, remain.

These scraps of evidence are, I think, worth recording in view of the earlier discovery of Beaker Folk at Broadstairs; and the more so because I see that two

other tumuli, one near Ringwould and the other, known as "Barrow Mount," about one a half miles from St. Margaret's Bay, are marked upon the Ordnance map. Possibly some day these may find excavators, but, in any case, the evidence is growing that Kent must be added to the recognised landing places of these round headed people who always buried their dead in a flexed posture and, generally, under round barrows. I am told that some beads were found with the bones, which, if Saxons were there, is not surprising; and Sir Johnston told me that he remembered hearing that an earthen pot had been found, though he did not know what it was like or where it had gone. F. G. PARSONS.

Egypt: Archæology.

Marples.

Ancient Reaping Hooks. Bu E. A. Marples.

The Egyptian reaping hook, exhibited under No. 52861 in the British Museum, is probably a late example of a very ancient implement. The hook is made from hardwood and is equipped with a set of molar-form flints to form the



cutting edge. These flints have serrated working faces and are held in position by a backing of bitumen.

The prototype upon which this ancient implement was modelled is a natural object that was sufficiently familiar to the early dwellers on the Nile; it is the jaw bone of Bos brachyceros.

The actual reaping hook and its archaic prototype are shown side by side in my illustration.

So far as working efficiency is concerned, I am prepared to say that there would be very little difference between the two. Both, I imagine, were in common use at the same time. But the ox jaw must have held the field for many centuries

before craftsmanship developed sufficiently to produce a workmanlike substitute. The spread of agriculture and a growing scarcity of the natural implements would furnish a powerful incentive to invention.

Baked clay sickles, from Mesopotamia, with traces of bitumen on the working face, and serrated flints from Palestine and elsewhere (identified by Sir Flinders Petrie as sickle teeth) suggest an early and widespread familiarity with the composite "ox-jaw type" of reaping hook. E. A. MARPLES.

India: Religion.

Richards.

"Black Magic." By F. J. Richards, M.A., I.C.S., (retired).

The houses shown in the enclosed photographs (Figs. 1, 2) were not wrecked by the act of God or the King's enemy, but by the owners themselves, under circumstances not unlike those described by Mr. K. V. Krishna Ayyar in Man, Sept. 1928, No. 115.

Arantangi is a little country town of some 3,000 inhabitants in the extreme south of Tanjore District (S. India), the corner, adjoining the Ramnad Zamindari, that separates the State of Pudukköttai from the sea. It was, in fact, a bone of contention in the good old days between the Rajas of Ramnad and Tanjore, and held by each in turn. It is now the headquarters of a Taluk, 382 square miles in area, with a population of over 113,000. It is remote from the human hive of deltaic Tanjore and over 250 miles in a bee line from Calicut, the scene of Mr. Krishna

Ayyar's incident. It would be difficult to find in S. India an environment so different, physically and culturally, from that of Calicut as Arantāngi Taluk, but it is only fair to add that the Palghat Brahmans of Malabar are immigrants from Tanjore.

It was in the forenoon of February 26th, 1900, that I passed through Arantangi, and found the Brahmans, in panic, stripping the thatch from the roofs of their houses



Fig. 1

and removing their belongings into the street. Over night no less than seven houses, in different parts of the Agraharam or Brahman quarter, had been burnt down by supernatural agency, and the whole Agraharam had been pelted with volleys of stones thrown by invisible hands. Stone-throwing continued in broad daylight, and the terrified villagers described how they saw the stones floating through the air within their houses in defiance of all laws of gravitation.



Fig. 2.

Another fire broke out after my arrival, and one of the householders brought me a rag-ball a little bigger than a tennis ball, which he had found under the eaves of his house. This ball was cautiously unwound, coram publico, amid breathless silence. The strips of rag and tow of which it was made had been rolled tightly together, rather like the packing of a fives ball; they were damp and said to smell of phos-

phorus, though I could not myself detect the odour.* In the very centre was a small fruit stone (Zizyphus jujuba, I believe), at the sight of which the villagers gasped audibly; for it was conclusive evidence that sorcery was at work.

But what distressed the Brahmans most was the desecration of their kitchens with blobs of boiled rice, coloured, some yellow, some magenta (apparently with tumeric and the juice of prickly pear), and all mixed up with clippings of human hair and nail parings. The blobs they found secreted in and about their cooking

^{*} A ball of cowdung with phosphorus inside placed in the thatch is a favourite mode of setting fire to a house in South India. When the sun dries the cowdung, the phosphorus ignites.

places. The purity of the kitchen is a point on which the Brahman is most sensitive, and if the cooking place is defiled there is no alternative but to quit or starve.

The significant fact about all these manifestations is that they were confined to the Brahman quarter, the residence of the most enlightened and prosperous section of the community, many of the residents being responsible public officers and thoroughly well educated. Mr. Krishna Ayyar suggests that the Calicut incidents were the outcome of some morbid neurosis in some member of the household. In Arantāngi blackmail was suggested; some professed expert in sorcery had, it was said, demanded a contribution from each household in the Agraharam, and was refused. The charge, I believe, was never carried to the law-courts; some Negapatam journalist got hold of the story and made it the text of a virulent diatribe against educated Indians in general, and the Arantāngi Brahmans naturally fought shy of further publicity. Yet the action they took to preserve their belongings and self-respect in the face of an orgy of arson and general nastiness was perfectly natural and sensible.

The general similarity of method in Calicut and Arantangi, and in particular the stone-throwing, arson, and defilement, suggest that both incidents owe their origin to a common heritage of witchcraft lore.

F. J. RICHARDS.

Congo: Technology.

Maes.

Au Musée du Congo Belge.—Grâce à la généreuse intervention du Baron

Lambert notre musée colonial vient de s'enricher d'une remarquable série d'objets éthnographiques. Signalons dans cette collection une figurine à coupe, telle que l'on en rencontre souvent chez les Baluba du Katanga. Celle offerte par M. le Baron Lambert est particulièrement intéressante par la stylisation de la tête qui marque son origine. La coiffure de la femme mendiante sculptée en forme de triple



Fig. 1.—Figurine mendiante de naissance des Bena Kanioka, don du Baron Lambert.

chignon, placé dans la nuque, est en effet celle que porte la femme Bena Kanioka. Jusqu'à présent le Musée ne possédait point de figurine femme mendiante de cette tribu. Il est d'un haut intérêt scientifique de pouvoir constater que la coutume familiale, qui impose au mari Buluba l'obligation de façonner une figurine femme mendiante lorsque son épouse se trouve dans une situation intéressante, soit également en vogue chez les Bena Kanioka! Aux derniers jours de la gestation, quand la femme ne peut plus se rendre aux champs, ni s'occuper des gros travaux de culture et de ménage qui lui incombent, la future mère place la figurine devant la porte de sa hutte. Elle rappelle aux passants la détresse de celle qui attend son enfant et les

invite à la secourir autant que possible. Grands ou petits, pauvres ou riches, déposeront dans l'écuelle de la figurine une petite aubole, et le soir, en rentrant des cultures, les compagnes de la femme se partageront les offrandes en échange des produits des champs, qu'elles remettent à la future mère, et des travaux exécutés dans ses cultures. Cette pieuse coutume familiale est également en vogue chez certaines populations du Yoruba, et, chose remarquable, les figurines mendiantes d'accouchement présentent chez les populations du golve de Guinée exactement

les mêmes caractères distinctifs et artistiques où perce la pieuse pensée du sculpteur; que nous retrouvons sur les figurines sculptées dans une même intention par les populations du Sud du Congo Belge! Cette analogie troublante rapproche d'une façon singulière des populations vivant actuellement à des distances de centaines de kilomètres les unes des autres et semble, malgré tout, les rattacher à une même souche ancêstrale. Dr. J. MAES.

REVIEWS.

Greece: Archæology.

Hall. The Civilisation of Greece in the Bronze Age. (Rhind Lectures, 1923). By H. R. Hall, M.A., D.Litt., F.B.A. Pp. xiv + 299. With 368 figures. London:

Methuen. 1928. 30s.

The lectures upon which Dr. Hall's magnificently illustrated volume is based were delivered five years ago, but the reader need not imagine that the book is equally antiquated. It is, on the contrary, thoroughly up to date, including even references (in the supplementary notes) to the second volume of the Palace of Minos, which is itself only a couple of months old. Indeed, the work before us represents the very newest account of Minoan civilisa-But it is not only new because up to date; it is also new in putting many points in a fresh light. It is a startling proof of the profundity and richness of the Cretan Bronze Age that it should be possible to write so many books about it, each of which brings out some novel and significant aspect of that prehistoric life.

Dr. Hall attempts neither a minute analysis of the archæological material, nor yet a comprehensive and systematic survey Only Crete and the of Minoan life. Mycenæan world are in focus on his screen. The Troadic, Cycladic and Helladic background only emerges hazily and sometimes distorted. Compelled by the terms of the lectureship to divide his treatise into six equal slices, Hall does not follow Sir Arthur Evans's main periods, but makes his breaks after E.M. II, M.M. II, L.M. I, and L.M. IIIa-a division which he does not entirely succeed in justifying. He gets his effects—splendid effects, too—by singling out with fine judgment and sketching in a masterly manner various aspects of the art, religion and culture of each phase. This produces a total impression that is at once faithful, vivid and convincing. But to appreciate the details the reader should be firmly grounded in the orthodox chronological scheme, and should have grasped clearly, from a study of more systematic but duller works, the differences between the several cultural groups and provinces. For, in addition to the unusual main divisions just noted, the lecturer jumps

about in the individual lectures from Crete to Troy, from "Urfirnis" to "Minyan." from Shaft Graves to Tholos Tombs, in a rather disconcerting manner.

But the total effect is thoroughly satisfying to those properly prepared to contemplate it. Within the limits of his impressionistic treatment, the author brings to light many novel facts of high value to the specialist. For instance, the debt of the Ægean to Mesopotamia (first emphasised, as Hall kindly says, by the reviewer) is here brought out as never before. Babylonian inspiration is seen in the pommel of the Mallia rapier, in the inlaid or relief decoration of stone vases, and in the use of larnakes for burials. The spiral itself is convincingly traced back to the filagree work of the lately discovered toiletcase from Ur. Conversely, the presence of Mycenican faïence articles at Ashur is here recognised for the first time. Another interesting point noted is that the reddened gold so richly represented in Tutankhamen's tomb was also used in Greece.

The style of the writing is extremely pleasant, which causes us to regret all the more occasional lapses such as the use of "native copper" when "local copper ore" is intended, or of the meaningless phrase " plain graves " to describe all varieties of Helladic tombs except cists. inaccuracies have never crept in, but it is untrue to state that the safety-pin "did not exist in Greece before the thirteenth century." No traces of L.M. IIIb ware, but gold work of quite good style, were found with the simple violin-bow V. G. C. fibulæ at Mycenæ.

New Zealand : Ethnology Te Rangi Hiroa.

The Evolution of Maori Clothing. By Te Rangi Hiroa (P. H. Buck). Memoirs of the Polynesian Society, Vol. 7, pp. xxiii + 248, 44 plates and 150 text figures. New Plymouth, N.Z. 1926.

In this work Te Rangi Hiroa, better known to an appreciative public as Dr. Peter Buck, has produced a masterly technological study. Not only has he lucidly analysed the various processes

concerned in the making of Maori clothing. but he has also contributed towards the solution of problems of a wider reference. After discussing the various types of garment in vogue in Polynesia he turns to the Maori craft and considers kilt, cape and cloak in all the diversity of technique and ornamentation. The processes employed are made clear by the numerous plates and diagrams. As a conclusion, though this is not the primary object of his research, the author sets forth the evidence for his view that the Maori brought with him from his Polynesian home the knowledge of single-pair twining, but that the more efficient two-pair interlocking weft, as well as the special technique of feather attachments and the wrapped twine weft of the coloured taniko ornamentation were evolved in New Zealand.

The high value of the monograph is to be attributed not only to the very careful and minute study of the actual details of construction and workmanship, but also to the manner in which the whole technological side of weaving is kept within its social and economic setting. The method of wearing garments, their æsthetic aspect, their importance as an indication of rank, the relative labour-cost of the different types, the respective parts taken by women and men in the work, and the magical regulations involved are all shown to have a bearing upon the technology of the industry. In such matters an example has long been set to New Zealand ethnographers in the work of Mr. Elsdon Best. Te Rangi Hiroa himself rightly says: "When the craft is a living one, museum " studies, valuable as they are, must be checked by the results of field work." He points out, for instance, that no museum worker could have imagined that Maori garments were made upside down, or sideways, as was actually the case, and on this basis alone is often able to correct the painstaking work of the late H. Ling Roth, who did not have the advantage of field observation.

Criticism of a mild order may be directed against the author's simple evolutionary method of treatment, involving a number of arbitrary assumptions, of which the validity is not examined. It should be made clear that he is really presenting us with a logical, not necessarily an actual, sequence of evolution in Maori clothing. The general principle that the simplest technique has been chronologically the first to develop cannot be accepted as axiomatic, and when applied to any specific case must be supported by empirical proof. That direct archæological evidence of this is wanting in the present instance does

not mar the value of the technological study, and shows that the statements as to the order of evolution cannot be raised to a higher level than that of hypothesis. The proposition that garments as provision against rain and cold were antecedent to clothing for ornament is again a matter for further enquiry. The author leads us in such attractive style along his path from the simple to the complex that we are apt to forget the possible existence of other routes. But further criticism of such a sound piece of technological research would be ungracious.

It augurs well for the co-operation in anthropology when a distinguished member of both the Maori and the European races has produced a monograph at once so readable and so full of scientific merit.

RAYMOND FIRTH.

Ethnography. Huntington.

The Human Habitat. By Ellsworth

Huntington. London: Chapman, 42 Hall & Co., Ltd. 1928. Pp. xii × 293.

Maps and Plates. Price 15s. net.

This book is described by the author in his Preface as "an attempt to give "the layman a true idea of human "geography as interpreted by the Amer-"ican school of geographers," discussion being confined to some of the main aspects of the subject. As the author points out, he and his colleagues are favourably situated for the study of some of the chief problems, especially those relating to the utilisation of the land; we may, indeed, trace in some of the characteristics of the American school the influence of a geographical environment contrasting with our own, which is merely topographical.

In a book of this kind, intended for the instruction of the public, it is unavoidable that there should be much that is elementary, but glimpses of the obvious are not necessarily repulsive; if the obvious were as plain as all that it would not be so frequently overlooked. On the other hand the subject involves problems that defy analysis, especially such as depend upon exact historical knowledge that is wanting. In these cases it is difficult for the author to make sufficient allowance for the human overflows and compulsions of past times, and the environment may be a little overworked. We may be interested in the picture of the nomad cutting his nomadism according to his habitat, but we wonder how far nomads are nomadic because they like it, because they have nowhere else to go, because they can do no other, or because they have got into the habit as well as the habitat. Some

of the roots of human geography lie deep in human history and racial psychology, and not much is known of either. Mr. Huntington does not shirk these complexities, and in certain cases in which he has at his disposal the data for a full discussion, he gives us a clear idea not only of the statics but of the dynamics of the problems. This is especially the case in the last two chapters, in which he considers the causes that have determined on the one hand the relation of the soil-characters to the nature of the modern population of Alabama, and on the other the contrasting conditions of present-day culture in two counties of Central Virginia (Albemarle and Buckingham). In both cases there are geographical factors that stand out as constant and unmistakeable, and historical and social factors that are more variable and elusive. It is especially significant that in two cases in which the latter factors are traceable, they are of extreme importance, so much so as in the one case (Virginia) to overshadow the geographical. No one will deny the immense effects of climate, soil, and other environmental conditions on the nature of human culture, but in remote times also there must have been many instances in which environment played second fiddle to occurrences that were so incalculable as to be fortuitous.

Amongst the many subjects discussed in this stimulating book are the effects of geographic extremes, desert borderlands, the margins of civilisation, civilisation of rice lands, health, energy, and progress, the contrast between China and Japan, America past and present. These topics and many others are treated from a broad and comprehensive standpoint, statistics being utilised when they are available. The result is a book which can be read with interest from beginning to end. Geography has gained in fascination since most of us left school.

H. S. HARRISON.

Psychology. Ellis.

Studies in the Psychology of Sex. Vol. VII. Eonism and Other Supplementary Studies. By Havelock Ellis. Pp. vii + 539. Chicago: F. A. Davis Co. 1928.

This volume is made up, as the author informs us, of what Schopenhauer would have called paralipomena and parerga. It consists of a series of nine essays on various subjects left over from, or byproducts of, the six monumental volumes of these Studies that were previously published. The individual essays deal with such varied themes as the doctrine of erogenic zones, the mechanism of sexual

deviation, dreams, kleptolagnia, the menstrual curve of sexual impulse and the history of marriage. The reader will find in them the broad humanism, the charm of style and the encyclopædic erudition that distinguished the previous volumes of the series; in a word, perusal of the volume will be a pleasant and profitable duty for every student of the psychology of sex. In view of this, no attempt at a critical review need be made here; and, indeed, no adequate review would be possible unless it were of great length. We may, however, note the introduction of two new technical terms: "Eonism" (from the Chevalier d'Eon de Beaumont, who died in London in 1810) in place of Hirschfeld's "Transvestism," and "Undinism" (from the mythological Undines) in place of what the psycho-analysts had termed "urethral erotism." In view of accepted precedents (cp. "Sadism" and "Narcissism" respectively), the use of these terms in place of their less convenient and less asthetically pleasing equivalents would seem to be in many ways desirable. Much the same considerations apply to the proposed substitution of the term "klepto-lagnia" to denote cases of sexually determined "kleptomania."

The issue of the present volume completes a very notable work, which has beyond all question exercised a great influence both on the development of psychology and sociology as pure sciences and on the general attitude of Western culture as a whole towards all questions connected with sex. J. C. F.

Czechoslovakia: Archæology. Schránil.

Die Vorgeschichte Böhmens und Mährens. Von J. Schränil. Berlin: Walter de Gruyter. 1928. Pp. 323. Price 34 M. (bound).

At last the results of Czech archæologists' fruitful researches into the prehistory of the lands now comprised within the new Republic are made available to all educated students in a book written by a Czech in the language spoken by nearly a third of his compatriots. Prof. Obermaier, in an introductory chapter, discusses the old Stone Age, giving the fullest account of Předmost yet available. Schránil, already known in England for his useful study of the Aunjetitz culture, takes up the tale with the Neolithic epoch. In his account he wisely follows in the main the divisions and classifications established by Stocký in his great Czech work, but extends his survey to Moravia and adds illustrations of many unpublished objects, all highly significant, from the Brno Museum. The Bronze and

Iron Ages are treated with no less competence. The book, when completed, will give a brilliantly lucid and comprehensive summary of the remains in one of the richest and best explored areas of Europe. The result is already a graphic picture commendably objective and unclouded by speculative comparison. The abundant illustrations are well chosen and successfully reproduced, though a great mistake has been made in not indicating the scale of each object on the actual plate. This must be rectified by the insertion of full details in the list of illustrations, not yet published. V. G. C.

Psychology. Rickman.

Index Psychoanalyticus, 1923-By John Rickman, M.A., M.D. London: The Hogarth Press and the Institute of Psycho-analysis, 1928. Pp. 276. Price 18s.

This volume, which constitutes No. 14 of the important series constituting the

"International Psycho-analytical Library." is a remarkable bibliography of works on, or referring to, psycho-analysis in all its many aspects as pure or applied science. It contains about 10,000 references to books, articles and reviews, mainly in English and German (which are the languages in which most psycho-analytical work has been written), but including a minority written in some nine other A striking feature is the systematic indication of where translations and abstracts of any given work are to be found. So far as the present reviewer has been able to test it, he has found the Index both full and accurate. Its compilation must have involved immense labour, care and patience; for which students in many fields will have occasion to be grateful to the author. It is unquestionably a work which should find a place in every psychological library.

J. C. F.

CORRESPONDENCE.

Africa: East.

Philipps.

"Banya Ruanda"

To the Editor of MAN. SIR,-1. My friend Père Schumacher, chargé de mission Ethnographique by the Vatican, is, and has for some twelve years been, in the extreme North-Western corner of ex-German East Africa.

In this area, under the generic appellation of banyaRuanda, there exist three divisions of the human race :-

Tutsi, semi-Hamitic pastorals of the ruling

Hutu, negroid agriculturists; and
Tua, pygmies, blood mixed by marriageby-capture, and privileged satellites of the

2. The researches of my learned friend have, I gather, led him to conclusions which, inter alia, tend to discredit the view that the pygmies were autochthonous. But rather that they came in with the Tutsi, by the upper waters of the Nile, some 400 years ago.

3. When living in the Tembura (Zande) country in 1925, I recorded a vocabulary of the Hima, of Bantu speech, who lie towards the French frontier between Tembura and Wau. Their language, fast disappearing under Zande dominance, is closely allied to that of the Hima of the Congo (Ituri), through whose country I have recently passed, and who constitute another link in the Hamitic-and-pyginy chain towards Ruanda—and perhaps away from Speke's Abyssinian (Galla) theory.

4. I note with satisfaction that Père Schumacher, while confirming the universal* monotheism, supports the view that the apotheosised† hero-cult was introduced by the Hamitic colonisers.

I am, Sir,

Your obedient servant, TRACY PHILIPPS.

Kabale (N.W. Ruanda), Kigezi District. 1st November, 1928.

* See Geographical Journal for April, 1923, p. 249.

† runyaRuanda verb kuRandwa, luGanda (non identical equivalent) kuSamira.

CORRECTION.

Attention has been called to a mis-spelling of the name of Prof. Arthur Thomson of Oxford in Man, 1929, 4. For Thompson read Thomson throughout.

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SIR CHARLES HERCULES READ, F.S.A., F.B.A. 1857—1929.

ORIGINAL ARTICLES.

With Plate D.

Obituary.

Balfour.

Sir Charles Hercules Read, July 6, 1857—February 11, 1929. By H. Balfour, M.A., F.R.S.

10

The news of the death of Sir Charles Hercules Read on the 11th February at Rapallo was, perhaps, not entirely unexpected by those who realised how his health had been steadily deteriorating ever since his retirement from active service. But the end came rather suddenly, and the shock conveyed by this news must have been very widely felt, not only by his many personal friends, but also among the even wider ranks of his admirers, who could not but realise that the study of the past had received a severe blow by the removal of one of its most brilliant followers. Read was in many ways fortunate. Not only was he a man of handsome and even striking appearance and highly gifted intellectually, but fate ordained that he should be able to pursue a career for which he was singularly adapted, and which gave full scope for the exercise of his special abilities. His interests and tastes covered a very wide field, and within his sphere of activity he was recognised as a high authority, and as one whose opinion was bound to carry weight. He was born on 6th July, 1857. Apparently he did not follow the usual educational course at a public school and one of the Universities, but received a private education which must have been a very sound one. The year 1880 was one of the chief date-marks in his life, since in that year not only was he married to a daughter of Mr. F. G. Smith of Gloucester, but he also became a member of the staff of the British Museum on his appointment as one of the Assistants in the Department of Antiquities. Here he worked under the direction and influence of Sir Augustus Wollaston Franks, whose stimulating example, enthusiasm and wide knowledge were powerful factors in developing the potentialities and in shaping the destiny of his very capable young assistant. Read's active and receptive mind readily responded to this influence, and the knowledge which he acquired was of the widest. He rapidly developed into an expert in many branches, and soon became a recognised authority as an archæologist, antiquary, orientalist, and ethnologist. His chief interests were centred upon the artistic achievements of the various cultures which he studied, and in matters of Art he was a true connoisseur. His position at the British Museum called for a wide range of knowledge and tended to develop catholic tastes. In 1896 Read succeeded his sponsor, Sir Wollaston Franks, as Keeper of the Department of British and Mediæval Antiquities and Ethnography, a position which he held (though the name of the Department was altered) until 1921, when he retired from the post which he had occupied so successfully. In 1912 his services were rewarded with a Knighthood. His abilities received wide recognition and he was elected President of the Anthropological Institute of Great Britain and Ireland in 1899 and again in 1917. He was President of the Society of Antiquaries of London from 1908-1914 and 1919-24, and he presided over the anthropological section of the British Association in 1899. In 1913 he was elected Fellow of the British Academy, and during his career was variously honoured by many societies both at home and abroad. His advice was constantly sought by collectors of the highest rank, such as the Rosenheims, Pierpoint Morgan and others, whose appreciation of the help which he gave to them was frequently expressed in tangible form, to the great benefit of the British Museum Collections.

Like many others who are engaged in the exacting administrative work in important Museums, Read's output of published works was unfortunately small, and in no way representative of his extensive knowledge. An ethnological paper "On the Origin and Sacred Character of certain Ornaments of the South-east

Pacific." published in the Journal of the Anthropological Institute in 1891, is of interest not only intrinsically but also because the results arrived at corresponded very closely with those reached quite independently by Dr. Hjalmar Stolpe, a Swedish ethnologist (whose important papers have recently been republished in English). In conjunction with O. M. Dalton, Read published an important volume upon the antiquities of Benin in 1899. He contributed papers to Archwologia and other scientific journals, and every one will regret that he was prevented from enriching the literature still further, and that so much of the knowledge which he had acquired will remain unrecorded. The effect of his influence at the British Museum will persist however. The complimentary volume which was presented to him at a special dinner given in his honour after he retired in 1921, is symbolic testimony to his successful administration and versatility, since it took the form of a record of some of the principal accessions to his department during his tenure of the Keepership. The very varied nature of these accessions bears witness to the range and elasticity of his interests, while their quality testifies to the ability and discernment which he displayed in attracting to the Museum objects both of beauty and of high scientific importance. In these days of increasing tendency to specialise in science, the men whose interests are wide-ranging and whose effective grasp covers a plurality of subjects are becoming steadily scarcer. The conspicuous gap in the ranks of these created by the death of Hercules Read, will keep us reminded of the place which he so ably filled. HENRY BALFOUR.

Britain: Archæology.

Moir.

A Remarkable Object from Beneath the Red Crag. $By\ J.\ Reid$ Moir.

During the year 1926 I conducted excavations in the detritus-bed beneath the Red Crag at a pit on the north bank of the River Gipping at Bramford, near Ipswich. The quarry, which is exploited by Messrs. A. Coe & Co., Ltd., is the most easterly of two pits in the occupation of this firm, and has been designated by me Pit No. 2, Bramford. It is well known to many archæologists and geologists, and from it I have recovered a number of examples of humanly-flaked flints.* The beds above the London Clay (which is excavated for brick-making) are in ascending order:—

(a) Detritus Bed to 1 ft. 6 in.

(b) Loamy sand, with horizontal stratification (Red Crag) to 4 ft.

(c) Glacial Gravel, with oblique stratification, and containing, in places, many flints and other stones, to 4 ft. 10 in.

(d) Upper Chalky Boulder Clay, in part decalcified to a reddish loamy sand, to 3 ft.

(e) Surface soil to 9 in.

The section at the pit under description is illustrated diagrammatically in Fig. 1.

In their work at this quarry, Messrs. Coe remove and dump the surface soil, the boulder clay, and the glacial gravel, while the loamy sand, representing the Red Crag, is utilised in the making of bricks. When we started excavating in 1926 we found an area of considerable extent of this loamy sand left in situ upon the underlying detritus-bed, and, before beginning to search for any specimens in this latter deposit, the loamy sand was barrowed away and placed in a convenient heap for the workmen. Thus, it becomes clear that any object found in the compact detritus bed must be referred to that deposit, and could not have been derived from any higher and later accumulation. The detritus-bed, at Pit No. 2, Bramford, rests at

about 100 O.D., and occupies its normal position, in the area under discussion, upon the surface of the London Clay. Further, its contents, as examined by me, accords with that of the other exposures of the same deposit in various parts of Suffolk, and is made up of typical sub-Crag detrital material. Moreover, the beds surmounting the loamy sand at Pit No. 2, Bramford, do not exhibit signs of glacial disturbance such as might have ploughed into the detritus-bed, and rearranged it with later material. The conclusion, therefore, must be that the object now to be described, which was removed from the detritus-bed by my trained excavator, John Baxter, formed an integral part of that deposit. The loamy sand above the detritus-bed does not contain any shells, nor any casts of mollusca, and I am of opinion that, in common with several similar deposits laid down by the Crag sea, it was never fossiliferous.

When the diggings carried out in 1926 were in progress, the various specimens deemed worthy of preservation were brought to my house, labelled, and put away in

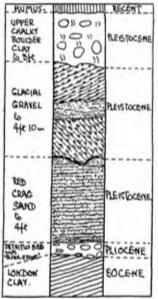


FIG. 1.—DIAGRAMMATIC SEC-TION (NOT DRAWN TO SCALE) OF BEDS EXPOSED AT PIT NO. 2, BRAMFORD, NEAR DESCRIPTION.

drawers. Among these items was an egg-shaped object (Fig. 2) which my excavator brought home because of its somewhat unusual form. This specimen, I regret to say, I did not submit to any close examination, and its real and remarkable nature remained unrecognised until the occasion of a visit to my house of M. l'Abbé Breuil. M.: Breuil; was greatly impressed with the object, and, at my request, wrote an account of it. This account, which has been translated by Miss Dorothy Garrod, is as follows:—

"While I was staying in Ipswich with my friend,
J. Reid Moir, we were examining together a drawer of
objects from the base of the Red Crag at Bramford,
when J. Reid Moir showed me a singular egg-shaped
object, which had been picked up on account of its
unusual shape. Even at first sight it appeared to me to
present artificial striations and facets, and I therefore
examined it more closely with a mineralogist's lens.
This examination showed me that my first impression
was fully justified, and that the object had been
shaped by the hand of man.

"In shape it is like a rather elongated egg, with "one end slightly blunter than the other. At each "end there is a small depression, or punctuation, and "other punctuations are visible on the body of the

object-four or five being grouped together in places into a rhomboid, or a straight line. It is possible that these are merely due to the decomposition of crystalline grains included in the general mass (which appears to me to resemble steatite). These tiny depressions are still filled with grains of sand cemented with ochreous and manganese material, spots of " which have stained the object at various points. The whole surface of the 'egg' " has been scraped with a flint, in such a way that it is covered with a series of facets " running fairly regularly from end to end. Each one of these facets is made up of " a number of longitudinal striations, the fine parallel lines being of unequal depth, as though they had been made by a slightly broken edge of flint. A number of " fine concentric incisions are visible at one of the poles, and others more or less oblique, one of the latter being fairly deep. The scraping described above covers "the whole surface of the object, and penetrates into its irregularities. As it stands, "the object is entirely artificial, and, although somewhat smaller, it recalls the " steatite sling-stones of New Caledonia."

In view of this excellent report, with which I am in agreement, it is unnecessary for me further to describe the specimen. I may say that it has been submitted to various well-known archæologists who, have, without exception, agreed that it is artificially shaped, and conforms in its general appearance with the sling-stones mentioned by M. Breuil. The specimen, which is of a greyish-brown colour, weighs, approximately, $\frac{1}{2}$ ounce; measures, in greatest length, 1_{7}^{6} in. and in greatest width $\frac{1}{1}^{4}$ in. The material of which it is composed seems now very hard, and its exact nature, at present, remains in doubt. I imagine that, at one time, the specimen must have been in a softer condition, to allow of the shaping being carried out, and, in its present state, such shaping would, I believe, be impossible. In experi-

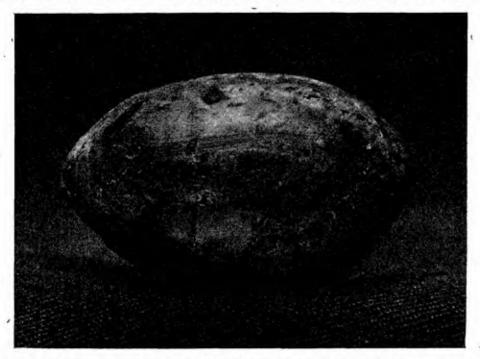
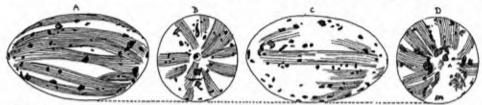


FIG. 2.—LATERAL VIEW OF "SLING-STONE" FOUND IN THE SUB-CRAG DETRITUS-BED AT BRAMFORD, NEAR IPSWICH. SOME OF THE MARKS OF SHAPING ARE CLEARLY DISCERNIBLE IN THE PHOTOGRAPH. THIS ILLUSTRATION SHOULD BE COMPARED WITH FIG. 3A, WHICH IS A DRAWING OF THE SAME SURFACE OF THE OBJECT (MAGNIFIED ABOUT 2½ DIAMETERS).

ments I conducted in shaping clay with a piece of sharp flint I found that I produced markings in every way comparable with those observable upon the "sling-stone."

The illustrations of the specimen have been prepared at the British Museum (Bloomsbury), and in the photograph (Fig. 2) are magnified about 2½ diameters. This magnification is necessary in order to make plain the marks of shaping, and the object should itself be examined with a fairly strong lens in order to appreciate it fully. The adequate illustration of such a specimen is a matter of considerable difficulty, and I would advise those interested in the matter to visit the Ipswich Museum, where the "sling-stone" is, by kind permission, to be deposited, and to examine it for themselves. In addition to the illustrations of the "sling-stone," I figure (Fig. 4) one of the flint implements found in the 1926 diggings at Bramford. It is a very well-made scraper, which exhibits the well-known dark mahogany coloration and other characteristics of the sub-Red Crag artifacts. During the excavations several fragments of deers' antlers

were found. These were submitted to Miss Dorothea Bate, who has kindly examined them, but informs me the material is so fragmentary that it is not possible to say much about it. A sample of the loamy sand above the detritus-bed was sent to my friend Prof. P. G. H. Boswell, who states that "I fear I cannot be very definite " about it. I should like to see the deposit in the field. In hand specimen it looks



Figs. 3a, 3b, 3c and 3d.—drawings of various aspects of "sling-stone" found in the detritus-bed beneath red crag at bramford, near ipswich. The most easily recognised marks of shaping only are fortrayed. (of the natural size).

" more like Crag than glacial sand, but it may, of course, be Crag material re-arranged by glacial action. From its mineral constitution it might belong to either deposit,

" for it can be matched with samples of either age."

It is very often impossible by an examination of the material itself to distinguish between Crag sand and glacial sand, but the position occupied by the bed at Bramford leaves no doubt in my mind that it represents the former deposit. Further, the

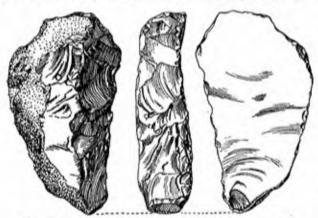


Fig. 4.—Flint scraper found in association with "sling-stone" in detritus-bed below red crag at bramford, near ipswich. († natural size.)

colour and condition of the sling-stone itself speak eloquently of its sub-Crag age, and, apart from any other evidence, would compel me to assign it to that epoch. If in this I am right, then it becomes clear that the presence of this object at such an horizon, as a study of the excellence of much of the flaking on the sub-Crag flint implements had led me to believe, points to the fact that man of the Pliocene period had already progressed some distance upon the evolutionary path, as it

seems impossible to imagine any ape-like creature producing artifacts such as have now been found in the detritus-bed. The discovery of this "sling-stone" is yet one more reminder that, to judge of the advancement of any prehistoric people merely by the stone implements they made, may be a risky and unsatisfactory procedure.

J. REID MOIR.

Egypt: Archæology.

Sandford and Arkell

On the Relation of Palæolithic Man to the History and Geology of the Nile Valley in Egypt. By K. S. Sandford and W. J. Arkell.

During the past two seasons, 1926–27 and 1927–28, we have been engaged upon a survey of the Nile Valley in Egypt, our objects being to trace the sequence and distribution of the human industries and their relation to the stages in the development of the river system.

The work is being carried out as part of the programme of the Oriental Institute of the University of Chicago, at the instigation of its Director, Professor James H. Breasted. The survey is still in progress, and any full treatment of the results must inevitably await its completion. In the meantime, however, we think it worth while to publish a brief summary of our results, in so far as they throw light on important or controversial problems. The groundwork was laid in an earlier season's exploration (1925-26) undertaken by one of us (K. S. S.) for the British School of Archæology in Egypt. The full results of this are now in process of publication.

In this résumé the observations of the three seasons are combined. The area already covered is as follows:-(1) Both sides of the Nile Valley from the First Cataract (Assuan) to Assiut; (2) Wadi Qena and the Ma'aza Plateau district:

> (3) The Red Sea littoral near Qosseir: (4) The eastern part of the Faivum and the neighbouring west bank of the Nile.

MEDITERRANEAN LOWER SINAL MIDDLE EGYPT. RED MA'AZA SEA PLATEAU CENA UPPER EGYPT LUXOR ESNA . KOM OMBO NUBIA IN CATA

1. OLIGOCENE AND MICCENE.

Within the above regions the Nile and its tributaries show distinct traces of two cycles of cutting down. in Miccene (and perhaps in Oligocene) times the tableland of Eocene sediments was raised with remarkable uniformity to an unknown height, with the result that the Oligocene river (or "Urnil") which joined the sea about the latitude of the Faiyum, carved a great gorge, through which the Nile still flows. South of Cairo there seem to be no deposits dating from the time of this first excavation of the valley, and the history of the period is written only in terms of erosion and earth sculpture. Huge landslips along the sides of the valley remain to show how the valley

was widened, and these have been erroneously held by some to be evidence of a rift origin.

2. PLIOCENE.

In Pliccene times the land sank or the sea rose, so that the valley became a long gulf, filled by an arm of the Mediterranean. In Lower Egypt we have found highly fossiliferous Middle Pliccene marine sediments up to a height of 100 metres above sea level, and have traced them upwards into estuarine and fluvial gravels to a height of 201 metres.

In Upper Egypt no marine fossils have been found between Assuan and Assiut, the presumption being that in the upper reaches of the gulf the water was fresh. Here great thicknesses of coarse conglomerates, grading into limestones and clays towards the centre, flank the sides of the Miocene valley up to a height of about 175 metres above sea level, where they terminate in a plateau. The head of the Pliocene gulf was found near Esna.

In Upper Egypt, where the valley is cut in hard limestones, the Pleistocene drainage followed the old lines, cutting down anew through the Pliocene filling.

In Lower Egypt the gravel and conglomerates choking the Pliocene tributaries proved harder than the surrounding terrain of soft Eccene marls and clays, so that they now stand out as high ridges. We have mapped and studied a number of these in the neighbourhood of the Faiyum, and so have been enabled to reconstruct the natural drainage system of Pliocene times. This has shown us that the Faiyum depression, as such, was not then in existence, but that the region formed part of the Libyan plateau and drained normally into the Nile. Only a small bay occupied the southern end, over the present Gharaq Basin. No evidence of any kind has been obtained favourable to the idea of the existence of Pliocene man in Egypt.

3. PLIO-PLEISTOCENE.

The fall of the sea from its Pliocene level (170–175 metres) was accompanied by the re-excavation of the Nile river system, in the course of which were cut a series of terraces bearing alien gravel brought down from the Red Sea Hills. In the Faiyum and Saqqara region we have mapped terraces at the following heights above Nile level:—

The height of these terraces show a general correspondence with those established by Lamothe in Algeria. Although searched diligently, they have yielded no implements and, except the lowest, no fauna. Certainly we can eliminate Egypt from the ever-lengthening list of supposed "cradles of the human race." On indisputable local evidence we attribute to these terraces a Plio-Pleistocene age, and from Depéret's work it would seem that they cover the Sicilian and Milazzian periods of the Mediterranean (i.e., post-Upper Plicene). Only the lowest has been recognised in Upper Egypt, where it is barren of implements and fauna.

4. PLEISTOCENE.

(a) Lower and Middle Palacolithic implements have been found in situ in Upper Egypt in a series of four river terrace-gravels, as follows:—

```
100 ft. = 30 metres above Nile, Chellean.

50 ,, = 15 ,, Acheulean and Micoque.

30 ,, = 9 ,, Early Mousterian.

10 ,, = 3 ,, Mousterian.
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These terraces have been followed and studied over some hundreds of miles on both sides of the Nile and the adjoining desert wadies between Assuan and Assiut.

Mousterian implements have also been found in situ in a gravel terrace in a wadi near, and draining into, the Red Sea near Qosseir. Here wadi-gravels pass into raised beaches and raised coral reefs.

In Lower Egypt, between the Faiyum and Cairo, the series is less complete. So far a representative of the 100 ft. terrace has not been discovered, and we found Chellean (usually rolled) and Acheulean (unrolled) implements in an old Nile channel at about 70 ft. which has its margin at about 80 ft. above Nile.

The Mousterian terrace, abounding in implements, stands at about 25 ft., and we have for the first time traced it through the Hawara Channel into the Faiyum. We have found that it falls some 5 ft. through the Channel towards the Faiyum, bringing Nile gravel with it, and passes on the inside into a well marked beach. It is thus shown that the Faiyum depression was by Mousterian times occupied by a vast lake, the connection of which with the Nile is now no longer a matter of conjecture or assumption. Numerous accurate determinations by Dumpy level have placed the water level of this lake at about 112 ft. above sea level. Along its east side, an immense storm beach of shingle and rolled Corbicula.

shells was piled up to a maximum height of 131 ft. O.D., showing the direction and force of the prevalent storm winds. We have found an abundance of fresh and unrolled Mousterian implements in situ in this beach at several sites, and have mapped it accurately over a distance of more than 50 miles.

(b) Later Palæolithic (post-Mousterian) history in Egypt is more involved. M. Vignard has shown that in the Kom Ombo plain the Mousterian industry developed locally on its own lines, the final product being comparable both in age and technique with the Tardenoisian. The whole of this Kom Ombo industry he termed the Sebilian (from the village of Sebil, near Kom Ombo). In the course of our survey we have had the good fortune to visit some of M. Vignard's sites and to extend the known distribution of the implements and the silts containing them from Assuan in the south to the neighbourhood of Luxor in the north. By a series of measurements at intervals we have determined that the dark, micaceous Nile silts containing the Sebilian implements associated with kitchen middens and numerous Corbiculæ and Unio Willcocksi (Bullen-Newton), are banked up and above the Mousterian terrace to a height of 50 ft. above Nile. Thus it is apparent that the Nile aggraded its bed up to the height of the Acheulean terrace, and we have seen the silts overlapping it. From Assuan to Edfu and Esna this level remains constant, but between Esna and Luxor it falls, until by Qena it is almost coincident with modern alluvium. North of this only small, low-lying patches of silt have been found as far as Nag'Hamadi, beyond which it is overlapped by alluvium. All the evidence, in fact, shows that the river of Sebilian times degraded its bed in Middle and Lower Egypt while it was aggrading it between the First Cataract and Esna.

Opposite the entrance to the Faiyum the present level of the Nile alluvium stands at about 95 ft. O.D. On entering the Hawara Channel it falls rapidly towards the Faiyum, spreading out in a sloping fan within the entrance. Along each side of the Channel we have detected another terrace of Nile gravel, which merges into a second system of beaches and storm beaches sweeping round the eastern side of the Faiyum, parallel to and below the Mousterian system. Mapping and levelling of this second beach showed that the water level stood at about 92 ft. above sea level, and the shingle bank is piled up to a height of about 10 ft. above it. In the Hawara Channel the rate of fall was greater than in Mousterian times.

Throughout this second system of beaches and terraces we found Late Palæolithic flint implements (i.e., post-Mousterian and of older Sebilian aspect) in situ in the gravel within the Faiyum and on both sides of the Channel. Near the Græco-Roman ruins of Philadelphia* alone we obtained in two visits more than 80 specimens actually imbedded in the beach shingle, and these, with others found elsewhere, serve to associate deposits and implements with Sebilian times in Upper Egypt.

After a long pause, during which this implementiferous beach was thrown up round the lake, the water level fell a further 18 ft. and formed another beach at 74 ft., with a shingle beach rising to 85 ft. This is the Pleistocene or 222 ft. A.L. (= 74 ft. O.D.) lake of Miss Gardner. The finest development of its storm beach occurs to the north of the ruins of Philadelphia, but it also continues far to the south-east, skirting the mouth of the Hawar Channel in the line of the Edwa Bank.

We believe the 74 ft. lake to be of Late Palæolithic age, a conclusion which is strengthened by a remarkable discovery in a secluded spot at the south-east corner of the Faiyum of no less than ten beaches in a descending series from the Mousterian level.

(c) The Transition to Neolithic Times, so far as stratigraphical evidence is concerned, is hidden beneath the modern alluvium in the Nile Valley, the Hawara Channel and the eastern parts of the Faiyum, but is available for study in the western parts of that depression. Here Miss Gardner has demonstrated a prolonged

period of subaerial denudation between the 222 ft.(= 74 ft.) and a 206 ft. (= 57 ft.) lake which is of Neolithic age. She suggests that the Nile, degrading its deep (now buried) channel, was no longer in contact with the diminishing Faiyum lake; that the latter dried up, and that erosion took place in a period of desiccation. We are of opinion, however, that the evidence points to the Faiyum and Nile remaining in contact, and to the lake draining itself into the Nile, i.e., the reversal of the Middle and Late Palæolithic drainage. This is a return to the simple Pliocene condition and we look upon the deeper parts of the Faiyum as the excavation of a normal tributary river valley draining by a deep Hawara Channel into the Nile, at that time flowing far below the sea level of the present day. Subsequently aggradation of the Nile in Lower, Middle and Upper Egypt, which is still in progress, has placed the river again in a position to flood the Faiyum, of which advantage has been taken through a large part of Egyptian history for irrigation purposes. The surviving lake of the Faiyum, now saline and 148 ft. below sea level, is accordingly controlled and acts as a sump or evaporating basin for the drainage water of the fields.

In addition to the industries mentioned above, which are now known and accounted for in geologically dated strata, there are others which are as yet known only upon the desert* surface. Among these were certain implements which we had already associated with the Asturian industry of Spain. Last season, in a brief co-operation with Mr. Guy Brunton, we found them in sitn in the deposits of a rock shelter with Early Kingdom pottery, crescentic grinders, borers, and other tools associated with an important gypsum industry.

K. S. SANDFORD.

W. J. ARKELL.

Brittany: Archæology.

Collum.

When I was working with M. Zacharie Le Rouzic of the Miln-Le Rouzic Museum, Carnac, in 1926, he entrusted to me the task of collaborating with him in a publication in English of the results of his 35 years of excavation, together with plans, of editing and amplifying his unpublished inventory of some 900 megalithic monuments and sites in the district, and of supplying introductory and comparative matter. Some recent significant discoveries were to have been published for the first time in English in this book. Circumstances, including the sore trial of his own semi-invalidism (he was stricken down last year), have delayed the preparation of this work so much that I feel that a preliminary note about some of the recent discoveries should appear here, as it may prove helpful to other students—which has ever been the single aim of all Le Rouzic's research.

Segmented Faience Bead.—During reparations to the scheduled dolmens of Parc-er-Guren ("Field of the Bees") in the summer of 1926, the earth from the floors was carefully sifted. That from No. 2 dolmen, a rectangular megalithic chamber with an entrance gallery in the remains of an elongated mound, and with a bætyl in the gallery and a stone block closing the chamber, yielded a unique find for French megalithic burial sites. This was a green-blue faience bead divided into five rounded segments, precisely similar to those found at Tan-Hill, Wiltshire, and at Fuente, Alamo, in Spain. The floor of this dolmen also yielded six flint flakes and a small retouched blade, some minute fragments of dolmenic pottery, sherds from an ornamented caliciform beaker, and a piece of copper which Le Rouzic has since satisfied himself is a portion of a triangular dagger of the rivetted type. This discovery, as M. Le Rouzic pointed out when he first communicated it in France, is of very great importance and supports the position that he has maintained for

^{*} Desert conditions we find to have begun in Egypt in post-Mousterian (Sebilian) times, appreciably sooner in Upper than in Lower Egypt. There is no sign that they existed in any previous episode of Tertiary or Quaternary age.

a quarter of a century that the evidence of the burial sites proves that the dolmens of the Morbihan were erected at a time when considerable elements of the local population had a knowledge of metal, though metals other than gold were very scarce.

Chloromelanite Axe-head copied from a Metal Implement.—The acquisition, a few years ago, of a remarkably fine big chloromelanite axe-head by the Carnac Museum established once for all what Le Rouzic has long pointed out, that many of the unused votive polished axes found in the tombs or set up in the earth in the fields are copies in precious hard rocks of metal models, for this example bears unmistakeable evidence in its details of form that it was so copied. (Dr. Kenji Takahashi, Chief of the Historical Department of the Imperial Household Museum, Tokyo, recently published a beautifully illustrated monograph dealing with the analogous Japanese prehistoric practice of copying metal tools in soft stone and using them for some votive purpose—as indicated by the holes for suspension and the fact that isolated examples have often been turned up by the plough. His most illuminating example represents a short-sword, sheathed, in which sword and scabbard are fashioned from a single block of stone. (Implements Copied in Stone from Ancient Burial Sites. By Professor Kenji Takahashi (in Japanese).)

New Capstone with Sign at Île Longue.—During the visit of a party from Leplay House at Easter, 1926, to Île Longue conducted by M. Le Rouzic (whom I accompanied), I unintentionally misdirected Miss Thomas, joint leader of the party, to the wrong capstone (the second) when meaning to indicate to her the well-known fifth capstone of the gallery with its triangular, plume-like device (Plate 61 and Stone 2 of the Plan in Corpus des Signes gravés des Monuments mégalithiques du Morbihan). By the light of her candle Miss Thomas did make out, at the right-hand extremity, some markings, and said so to me when I told her she was looking at the wrong stone. Having an electric torch with me I was able to thrust it far into the cavity in the wall between the supports and found that the under surface of the stone at its righthand extremity bore plume-like markings resembling those on No. 5, and on the second support on the left from the gallery entrance. In May, M. Le Rouzic and I returned to the island with two boatmen, and a mason's jack capable of lifting several tons. He had the superincumbent stones of the cairn removed from this portion of the gallery and the capstone in question jacked up and slightly revolved on its own axis, to enable us to photograph it from the cairn above and to enable him to make a plaster cast from below. The accompanying photograph (Fig. 1), which I took on that occasion, shows that this curious plume-like-or perhaps one should say palm-leaf fan-like-device, already twice carved on stones in full view in the gallery, was here carved at the head of a pillar used as a cap-stone and incorporated in such a way in the gallery roof that the carving was practically invisible. (Owing to the fact that the corbelled chamber of Île Longue remained so long with its missing summit-stone unreplaced, there has been no need to use artificial light in this monument for many years, and, without the strong shadows cast by an artificial light held close to it, the markings would be impossible to detect, although they were suspected by Le Rouzic when he assisted d'Ault du Mesnil to restore the chamber and gallery in 1907, when their existence was denied by M. d'Ault. It is only within the last few years that a new stone was placed over the opening by M. Le Rouzic, to protect the interior of the chamber from weathering caused by heavy rain. The inscribed stone has been left slightly turned over so that the device may now be seen.) This discovery thus underlines the observation that many of the chambers with signs carved on their stones have particular motifs (Les Pierres Plates, e.g.), almost as though they were emblems connected with a particular monument. The sculpture on one of the paving stones lying athwart the gallery.

in such fashion that it must be stepped over to enter the chamber (discovered beneath the silted deposit on the floor in 1907 by Le Rouzic), and in which M. Le Rouzic is inclined to see a conger-eel, might also represent either a long-sword, or a long-boat with upturned prow. I was unsuccessful in obtaining a photograph, but it is illustrated in Plates 62–4 of the *Corpus* already cited.

Sunken Kist in Megalithic Chamber at St. Germain, Erdeven.—Having succeeded in getting this monument scheduled for preservation, M. Le Rouzic undertook its excavation and reparation in April, 1926. The chamber, partly megalithic and partly constructed of dry masonry, which had once been corbelled and galleried, is enclosed in an earthen mound which has been shorn by the plough to within a few inches of the stonework, and was excavated (i.e., broken into through the roof!) in 1877 by Chaplain-Duparc, who published no report, but who is said by Gaillard, in an Inventory published many years ago, to have discovered an object in (!) gold,



FIG. 1—THE NEW SCULPTURED CAPSTONE IN THE GALLERY OF THE CHAMBERED MOUND AT ÎLE LONGUE,

subsequently acquired by the museum at Le Mans (which Le Rouzic has been unable to trace). In the floor of this irregularly-shaped chamber, forming the foundations of the wall at its western part, were three courses of over-sailing slabs (one of which was a primitive quern) which had been reddened by fire and which lay on a large slab covered by silted earth. When this slab was lifted we found that it served as the lid of a sunken stone box-kist formed of five slabs. It was 1·65 long, 1·05 wide, and 80 cms. deep, its long axis lying N.N.W. and S.S.E. Its floor was formed of the living rock. The kist was full of silted earth, penetrated by dead gorse roots which had worked their way in between the slabs, and the earth had been disturbed by rodents. A layer of black earth, about 20 cms. deep, at the bottom, contained minute fragments of charcoal and burned bones, sherds of ordinary dolmenic pottery and one black sherd, and a flint flake. A small piece of fashioned

wood with a hole in it was found in the silted earth. In the earth thrown out from the floor of the chamber I found sherds of coarse dolmenic pottery, while the workmen unearthed another quern, three milling stones, a granite burnisher, three quartz hammer-stones, and some characterless flint flakes. I also found sherds of dolmenic pottery and minute fragments of calcined human bones, and bones of rodents, in the ploughed earth at the base of the diminished mound. A curious feature of this monument was a shaped ogival stone which formed the first support on the south side, reminiscent, on a small scale, of the graven stone support at the head of the Table des Marchands. Near this dolmen there is a chapel dedicated to St. Germain which stands in the remains of a large cromlech, and another, ruined, dolmen incorporated in a stone bank.

Skull, Narrow, Long-Headed Mediterranean type from Er-Yo'h.—A human skull found during the excavation in 1923 of the habitation site at Er Yo'h, having fallen in a miniature landslide from the midden, and entrusted to me for examination under the guidance of the Conservator at the museum of the Royal College of Surgeons of England, was pronounced by Sir Arthur Keith (who has kindly written a chapter on it for inclusion in the book now in preparation) to be of the dolichocephalic Mediterranean type, represented by the pre-Dynastic Egyptians of the type described by Fouquet, by the Ur skulls, and by the English Long-Barrow skulls, and reminiscent in its physical characters of the Homme-mort (Lozère) and Montouliers (Hérault) skulls. Its maximum length was 193 mm., and width 135 mm. It falls into line with the long narrow skulls found in kist burials in the Carnac region (most of which appear to have been either destroyed or lost after they were sent to Paris in the early days of excavation), and suggests that at the time of the Megalithic monuments a part at least of the population enjoying some of the benefits of the associated culture, such as pottery, grain-growing, domestication of animals, etc., was of the indigenous Cro-Magnon breed which had lived for long by fishing and shell-fish gathering, on the coasts, and by hunting in the more hilly regions of the interior as at Homme-mort and Montouliers in the Lozère and in Hérault.

Dwelling Site Pottery.—Another important discovery of recent years has been that the domestic pottery found in the midden at Er-Yo'h, in the hill-top camp of Le Lizo, and in the factory-site of Er-Lanic, is associated with "dolmenic" pottery, thereby linking chronologically the rude stone hut foundations of Er-Yo'h, the fortified camp of Le Lizo (in which is a dolmen which yielded caliciform beaker pottery and a graven stone), and the industrial activities carried on within the stone circle at Er-Lanic. (Other cromlechs have been excavated and hut-foundations and hearths found.) The industry here was pre-eminently the manufacture of the ornamented cylindrical pedestal stands (once misleadingly known as "vases supports"), of which type some almost perfect specimens were discovered in situ in the chambered mound of La Hougue Bie, Jersey, standing on the floor at the foot of megalithic supports at the corners of the structure. Another industry appears to have been the fashioning of jadeite votive axes (there are veins of this rock in the vicinity); evidence was also found of broken pendants with original cylindrically bored holes having been re-perforated here with hour-glass perforations. The technique of the domestic pottery common to these three sites is what would be set down by most archæologists, if found in this country, as Hallstadt. It is always associated with the rudest of flint implements at Carnac. V. C. C. COLLUM.

Anthropometry.

Parsons.

A Radial Craniometer. By Professor F. G. Parsons, F.S.A.

In response to a number of requests from those interested in anthropometric measurement the radial craniometer, of which a drawing is given, has

been placed on the market, and may be obtained from the Royal Anthropological Institute.* It is intended to record the whole profile of the head and face.

When the arc is fitted by its plugs into the earholes the distance of any and every point in the midline, from the meatus, can be found quite readily; but this

is not enough, because, not only the distance but the direction of each point must be known, and to find this the celluloid protractor is fitted on to the bar which bears the right ear plug, on the inner side of the metal arch which crosses the head. This is easily done by unscrewing the bar.

At 90° on the protractor scale a metal bar (A) runs forwards, the centre of which must be so directed that it corresponds with the infraorbital margin, a point quite easily felt through the skin, which it is convenient to mark with a blue pencil.

On the bar (A) another bar (B) slides at right angles, and r should be so adjusted that its upper sharp edge passes horizontally on a level with the blue mark. Now the zero of the protractor scale points towards the top of the head and is stationary, while the arc and distance scale (C) can be swung

round from the chin to the occiput and the angle and distance of as many points as possible in the median contour noted and recorded. Some of the points, such as the chin, the mouth, the tip, bridge and root of the nose, the glabella (D), and the inion (E), are fixed; but the vault of the head is best recorded by a series of measurements 10° or 20° apart. Where the angle of measurement, as, for instance, at the tip of the nose or at the chin, makes it impossible to read the scale directly, it can be read by means of a small mirror.

In using the screw adjustment of the distance scale (C) be careful that the rod (F) is not screwed down beyond a point at which it just touches the skin. Of course, the length and breadth of the head should be recorded with the callipers in addition to these measurements.

F. G. PARSONS.

Rhodesia: Religion.

Shropshire.

A few months ago I spent several days amongst the WaBarwe tribe in the north-east of Southern Rhodesia and was able to make many notes concerning their beliefs, customs and manner of life. Staying with a Nganga who was both a diviner and a doctor, one day I was talking to him of their customs concerning childbirth, and asked what was their belief and practice with regard to the placenta. He at once became apprehensive and hesitated to answer. I then told him that I knew what a neighbouring tribe, the WaManyika, did in this regard, and this opened the door to the following information:—

Among the WaBarwe the placenta is not buried as is the case with some Bantu tribes, but is carefully preserved. After a while, it is cut into pieces some of which are put into a small calabash. This calabash, together with shells, medicines, and strings containing parts of the umbilical cord, are made up into a bundle which is called the Jangu. The bundle has a cord attached, by means of which, at the birth of her next child, the mother puts it round her forehead and over her

^{*} The price of the craniometer is £6 6s. 0d. Callipers for measuring head length and breadth may also be obtained, price £3 3s. 0d.

Hei-//om Bushmen, the greater part of which is substantially reproduced in his article noted above; an interesting his-torical sketch by Dr. C. Frey of the famous Hottentot chief Jonker Afrikaner; and two rather speculative articles by Dr. Vedder on the racial history of the Bushmen and the Hottentots. We shall look forward with expectation to future publications of the Society, of whose success the quality of the present volume should be a guarantee. I. S.

Egypt: Archæology.

Imhotep. By J. B. Hurry, M.D. Oxford University Press. 1928. 2nd edition. 26 illustrations. Pp. 211.

It is a gratifying fact that a book like Dr. Hurry's, which is essentially for the general reader, should reach a second edition in so short a time, for it shows that the interest in Egyptology continues to increase. It is, of course, written entirely from the doctor's point of view, and will necessarily appeal to the medical confraternity and to that great mass of the general public who are interested in matters medical. Dr. Hurry naturally magnifies the importance of the god of healing, and lays great stress on the antiquity of the medical profession. The new edition is not altogether an improvement on the first, though it contains another hundred pages. Quantity is not always equivalent to quality, and the few facts which were omitted from the first edition might have been added in a very few paragraphs. However, in spite of some defects, the book gives in an easy and readable form practically all that is known of one of the minor gods of Ancient M. A. MURRAY.

Africa: Sociology.

Bryk.

Neger-Eros: ethnologische Studien über das Sexualleben bei Negern. 31 Von Felix Bryk. Berlin und Köln: A. Marcus und E. Weber's Verlag, 1928.

With 85 blocks in the text and one plate. This little book is a welcome addition to the scanty literature on the sexual life of the more primitive peoples. It deals with such tribes as the Nandi and the BaGanda, and discusses shortly a number of the topics which are usually avoided in the descriptions of anthropologists. Thus there are included brief notes on prostitution in the native villages; the practice of perversions, which the author found to be much rarer than is commonly believed; and the customs of the people relating to pregnancy and abortion, which will be found of some interest to those who wish to compare the sexual life of the African communities with that of more civilised E. J. DINGWALL. parts of the world.

CORRESPONDENCE.

Greece: Archæology.

Hurry.

The Origin of the Greek χάλκος.

To the Editor of MAN.

SIR,—In his interesting communication 58 on the Greek δρείχαλκος Mr. O. Davies suggests that the Greek χάλκος was a borrowed word. In one of the Cappadocian cuneiform tablets published by Dr. Conteneau in 1920 Khalkis is mentioned as a place from which copper was brought, and it is possible that the local name was the origin of the Greek word. Khalkis signified "wheat" in Hittite. so that if the city were in Hittite territory the name would have meant "Corn "(-town).

A. H. SAYCE.

Malta,

5th February, 1929.

Savce. Prehistory:

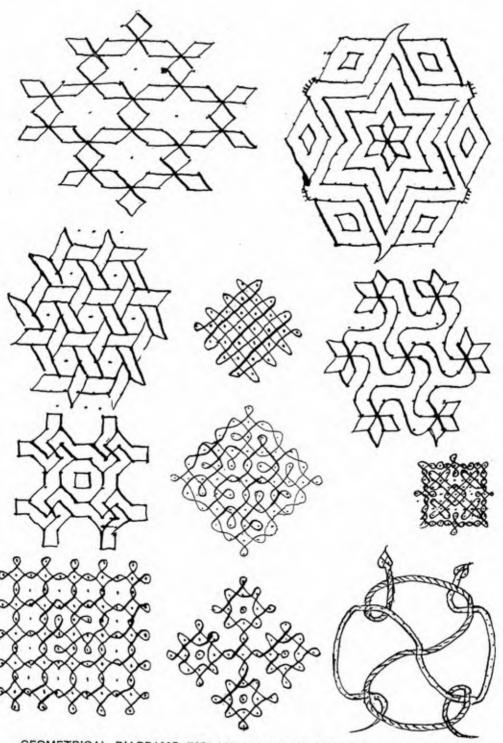
Perry.

Sumer and Egypt. To the Editor of MAN.

SIR,—In Man, 1929, 18, I used the term "biscuit-shaped bricks" to describe the flat bricks of the earliest cemetery at Ur and those of Egypt. I find, on re-reading the report of the Field Museum Oxford University Joint Expedition to Kish, published in 1925, that Mr. Mackay uses this term to denote a flat type of plano-convex brick. My use of the term is, therefore, invalid. In my article I intended to say that, so far as I understand Mr. Woolley's description and his illustration the bricks of the earliest graves at Ur approxi-mate nearer to those of Egypt than do those of later cemeteries at Ur.

Yours etc., W. J. PERRY.

12th February, 1929.



GEOMETRICAL DIAGRAMS (KOLAM) FROM THE MADRAS PRESIDENCY.

ORIGINAL ARTICLES. With Plate E.

India: Art. Durai.

Preliminary Note on Geometrical Diagrams (Kolam) from the Madras Presidency. By Mrs. H. G. Durai. With Plate E.

On October 19th, 1927, Dr. Haddon read a paper before the Cambridge Anthropological Club on the late Mr. A. B. Deacon's investigations in Malekula, in which he referred to and showed examples of the geometrical diagrams which Mr. Deacon had discovered in that island. This at once recalled to my mind that analogous diagrams are constructed every day among the Hindus of the Madras Presidency. I have no knowledge on this subject regarding the other parts of India. I propose on my return to India to investigate the subject in as great detail as possible and find out the real significance of these patterns, of which I give a few illustrations.

Very early in the morning Hindu women and girls are busy sweeping the ground in front of their houses, sprinkling water, or cowdung and water, to lay the dust.

Then they proceed to make patterns over the prepared ground, stooping down as they trace the designs with a white powder (flour or ground quartz), which they take between the thumb and first finger.

The diagrams are made in front of the house and inside. There are some for every day, and others for special occasions, like marriage, when the bridal pair have to sit on certain patterns. Only when a death occurs is the house left undecorated. These are decorative designs, marks of grace and prosperity.



Fro. 1.

In all cases there is a framework round which a diagram is made. Usually it is a series of dots in rows, and the dots are connected by lines. In some, single or double-lined crosses are first made, and the lines extended therefrom. In the actual diagrams where the lines pass over the dots, the latter become obliterated, so that only the continuous line appears. In some of the sketches, in Plate E, the preliminary dots are visible. Sometimes the lines go round the dots and sometimes there is one continuous line. Fig. 1 gives a simple illustration of a continuous line.

H. GNANA DURAI.

Ireland: Archæology.

Burchell.

Some Irish Pleistocene Deposits and their Correlation. By J. P. T. Burchell.

The correlation of boulder clays and their intervening deposits over wide areas is a hazardous, though none the less necessary, enterprise, where archæological and faunistic evidences are scanty. In Co. Sligo a tripartite division of the glacial sequence was reported upon by J. R. Kilroe in 1875(1) which consisted of:—

 An upper boulder clay, brown, sandy and loose, containing quartzite and sandstone fragments in abundance but only a few pieces, proportionately.

of limestone. Some of the fragments striated.

2. Stratified gravels, sands and loams.

1. A lower boulder clay, dark-grey, fine-grained and closely compacted, made

up for the most part of striated fragments of limestone.

Mr. Ernest Dixon and I have noted that the rock surface beneath the lower boulder clay shows, in places, a double set of striæ. The stronger series, representing the glaciation responsible for the deposition of the lower boulder clay, is directed from E. 35 S., whilst a weaker set, presumably earlier, is directed from E. 30 N. The boulder clay resulting from the earlier glaciation would in no way differ from

that of the later glaciation. The only clue for the detection of this earlier boulder clay would be afforded by gravels, sands and loams dividing the dark-grey till into

two portions.

The same tripartite sequence as described by Kilroe is to be observed in the neighbouring counties of Mayo and Galway and has been described by T. Hallissy in 1914.⁽²⁾ Passing across the island to Queen's County and Cos. Kilkenny and Carlow, a similar series of sections was described by E. T. Hardman in 1875,⁽³⁾ who rightly, I think, claimed for their counterpart the Sligo deposits referred to by Kilroe. These two boulder clays are generally recognised as the products of local glaciation.

Further east, in Co. Wexford, and extending both northwards to Co. Donegal and southwards to Co. Cork, a tripartite arrangement is also well displayed, the best description of which was supplied by Cole and Hallissy in 1914.(4) The

sequence of the deposits shown by them is :-

 An upper boulder clay, either dark-grey and tough or else brown and loose, according to the nature of the country from which it had been derived; the rock fragments of which are heavily striated.

2. Stratified gravels, sands and loams, containing marine shells derived from

an underlying boulder clay.

 A lower boulder clay, generally chocolate coloured and tough, containing erratics from the north-east and shells plucked up from the bed of the Pliocene

sea, the rock fragments and foreign erratics being striated.

Along the east of Ireland, therefore, there is evidence of an invasion of the seaboard and penetration inland by foreign ice from the north-east and a subsequent overrunning of the same area from the west by a local glaciation in the form of the Ivernian ice-sheet. Previous correlation schemes have all, so far as I am aware, treated each member of the three tripartite sequences above referred to, as being contemporaneous. This, I submit, does not represent the correct interpretation of the sequence of the deposits under review. The sections which, in my submission, invalidate the foregoing correlations are situated in counties which I have already had occasion to mention, namely, Co. Galway and Queen's County. Details of these sections are given hereunder:—

				C	ounty	Galu	ay.						
	5. Vegetab	le soil -		-	-	-		-	-	-	1 it.	. 6 in	
	4. Upper 1	boulder o	lay -		-	-	-			-	1 ft.		
	3. Lower 1	boulder o	lay w	ith ser	ratched	l and	polish	ed lin	neste	one	20 ft.		
	2. Black c	lay with	cones	s and	leaves	of p	inus s	ylvest	ris a	and			
	abies ex	celsa -		-	-					-	4 ft	. 3 in	
	1. Lenticul	lar layers	of b	lack c	lay an	d fin	e sand	, with	cor	ies,			
	leaves a	and stick	s of 7	inus a	sylvestr	is ar	nd abie	s exc	elsa		5 ft.	3 in	
											00.0		-
											32 ft	. 0 in	
				G.	neen's	Cou	nty.				-		70 -
	Vegetable so		-		1 ft.	4.	Vegeta	able s	soil				1 ft.
7.	Upper bould	ler clay		-	3 ft.		Upper						4 ft.
6.	Lower boul		y, w.	ith		2.	Lower						
	limestone bo	oulders		- 6	60 ft.		limest	one l	oould	lers			81 ft.
	Fine sand			- 1	0 ft.	1.	Sand	and g	grave	l, wi	th pie	ces	
	Gravel -		-	-	9 ft.		of wo	od 5	in. ii	n dia	meter	of	
3.	Blue clay		-	-	4 ft.		either	biro	h o	r ha	zel a	and	
2.	Peat -		-	-	3 ft.		hazel:	nuts	-		-	-	7 ft.
1.	Whitish clay	y -	-	-	6 ft.								,
				-								-	
				2	6 ft.								93 ft.
				-								_	

G. H. Kinahan, who recorded these particulars in 1865 (5), submitted the lower beds as evidence of land-surfaces of pre-glacial age. (6) It is my opinion that these infra-glacial deposits below the dark-grey lower boulder clay are of inter-glacial age, and that their correct horizon in the sequence lies between the shelly basement boulder clay deposited by the foreign ice and that of the subsequent local and maximum glaciation of the Ivernian ice-sheet. They should, therefore, be equated with the gravels, sands and loams of the east coast described by Cole and Hallissy. In support of this contention I would point out that along the south coast gravels, sands and loams occur beneath the dark-grey lower boulder clay of the local Ivernian glaciation, resting upon the shelly basement boulder clay of the foreign, Scottish or Irish sea ice. (7) These gravels, sands and loams I would correlate with the infraglacial beds of Queen's County and Co. Galway described by Kinahan. Along the south coast and up the east coast for some distance the upper boulder clay of the local glaciation, brown, sandy and loose, appears to be replaced by an upper head: the upper boulder clay, however, is to be seen to the west of Dublin city, resting above the lower, dark-grey boulder clay of the Ivernian ice-sheet, as is the case in Cos. Sligo, Mayo, Galway, Kilkenny, Carlow and Queen's County. To the south of the city the boulder clay of the Ivernian glaciation rests above the shelly basement boulder clay of the Scottish or Irish Sea ice.

In the light of these evidences I advance the following correlation scheme, which agrees, in a remarkable manner, with the results achieved in East Anglia by my

friend Mr. Reid Moir :-

Correlation Scheme.

Deposits.

Culture Stages.

General glacial retreat; formation of youngest recessional moraines. Epi-palæolithic.

 Return of glacial conditions; re-advance of Scottish ice; formation of local upper boulder clay (brown, sandy and loose) of Cos. Sligo, Mayo, Galway, Kilkenny, Carlow and Queen's County, etc., and upper head of the south coast.

Magdalenian.

Deposition of gravels, sands and loams of Cos. Sligo. Mayo, Galway, Kilkenny, Carlow and Queen's Co., etc. Solutrean, Aurignacian, Upper and Middle Mousterian.

- Return of glacial conditions attaining maximum glaciation; formation of Ivernian or local lower boulder clay (dark-grey and tough) of Cos. Sligo, Mayo, Galway, Kilkenny, Carlow, Queen's Co. and Cos. Cork and Waterford, etc.
- Deposition of gravels, sands and loams of Cos. Galway, Cork, Waterford, Wexford, Queen's Co., and Cos. Dublin and Donegal, etc.

Lower Mousterian and Acheulean.

 Invasion of Scottish and Irish sea ice; formation of shelly basement boulder clay of Cos. Cork, Waterford, Wexford, Dublin and Donegal, etc.; and formation of lowest local boulder clay. Infra-glacial land-surface as represented by the Nemestown loam. Chellean.

J. P. T. BURCHELL.

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(*) Ex. Mem. Sheets 115 and 116. 1865. Pp. 28-9. Geol. Mag., 1865. Dec. 1. Vol. 2. Pp. 442-4.

(6) Geol. Mag., 1865. Dec. 1. Vol. 2. Pp. 91-3.

(7) Scien. Proc. Roy. Dublin Soc., 1903-5. N.S. Vol. 10. Pp. 250-324.

Rhodesia: Science.

Shropshire.

The Medical Outfit of a Wamanyika Doctor. By the Rev. Denys Shronshire, C.R.

The medical outfit here described is that of a Nganga (doctor) of the Manyika

tribe living in the north-east portion of Southern Rhodesia.

From first-hand information and observation I infer that the members of this tribe distinguish between the Chiremba (the Herbalist), the Nganga (the Herbalist who also practices the Diviner's art, sleight of hand tricks and other deceptions), and the Murovi (the Sorcerer or Witch Doctor proper). From our knowledge of primitive mentality and the concept of "mystic participation" which M. Levy-Bruhl has emphasised, we shall expect to find that the above distinctions are not always very clear-cut but, on the contrary, are often confused. This, as a fact is so, for both the Chiremba and the Nganga may also be a witch doctor, though they need not necessarily be so. Indeed both of them may have nothing whatever to do with the practice of witchcraft. This, I believe, is the case with the person whose medical outfit I am about to describe. Such Nganga, according to their knowledge, often do a great deal of good work in the heart of healing, in spite of the fact that they also practise the well-known tricks, sleight of hand, divining deceptions, and other devices which are found all over the primitive world and even among many civilised peoples. With regard to the practice of such tricks, there is more excuse for primitive people than for those nurtured in a civilised environment, because of the whole background and principles on which their life is based-such notions as sympathetic magic, mystic participation, and above all their lack of knowledge of the true operation of the Principle of Causation. I will now proceed to give an account of the outfit. A photograph of the Nganga and his outfit may be seen in Fig. 1.

In his house there is a tree stump with many branches on which the nakona

(horns containing medicine) hang.

Mangondoza.—This is a well-carved image of a doctor wearing a medicine man's dress (see photograph) as follows:—

Chiremba .- The head-dress or crown, the sign of the Nganga's profession.

Tail of a buffalo round his neck.

Ndoro (a large white circular shell on his breast). and Chuma (long white beads round his neck), the insignia of a doctor.

Other white bead decoration hanging down below the breast.

Mamhanda.—This is a string of red and white beads containing also three kinds of medicine:—

Umvamaropa, for making smoke in order to make a person perspire.

Tsumba, medicine which is merely worn to protect a person from any danger from lightning. Mwonya, to protect people from lions. It is put in the place where lions have been.

Makona.—Three horns. One very large, containing a mixture of medicines which is kept in the Nganga's house in order to protect the village, but is also used to cure the people of the village when they come to him. The one next in size is used for the same purpose. The smallest ngona contains a mixed medicine called Komararutsanga, used to cure shivering and a shaking body.

Two Muswe.—Two tails of animals, one large and one small, containing four kinds of medicine mixed together. The Nganga cooks porridge with medicine in it for the sick people to eat. He then puts water on the fire with medicine in it,

dips the Muswe in the water and beats the sick person with it.

Calabash (ngona).—Containing medicine called Midzi ye Chinamata, which is taken by barren women in order to make them bear a child.

Calabash. — Containing medicine called Komara ra mabvi, which is used for detecting thieves, i.e., by their not being able to lift a basket which contains this medicine.

Hosho.—A calabash rattle which the Nganga uses in the preparation of the Komara ra mabvi basket test.

Banda (in two tins).—A medicine taken in porridge to cure headache.

Gunga.—A circlet of medicine on four strings of beads.

Used to rub on a painful part of the body.

Hakata. — Three seeds of the Hakata fruit, each divided



FIG 1 .- THE NGANGA WITH HIS OUTFIT.

into two parts, used for divining purposes. He sits on the ground with a map in front of him, takes his Hakata, claps them together in his hands and throws them on the mat. According as they turn upwards the answer is given favourably.

If only one is open or turned upwards it is called lumwe.

If all are closed, i.e., turned downwards, they are called ndubatongwa.

People inquire of the *Hakata* concerning such things as sickness, a good journey, the kind of reception they will receive at the journey's end, the *Midzimu*—time of worship, etc., and when selling goats, mealies, and other things.

Doctors throw the *Hakata*, but also people who are not doctors; for example, prophets (diviners). A person will often go first to the prophet for *Hakata* in order to be sure of going to the right doctor, for if he went first to a doctor the doctor might throw in his own favour.

The following six kinds of medicines are roots or other parts of different kinds of trees:—

Mutiti.—This is used as a kind of ointment. It is ground up and smeared in any wound.

Rukangaza.—This is used to cure urine droppings. He cuts a piece and puts it in a pot, with meat, which is eaten. The medicine left behind is then put in a bottle and is given to the patient to drink.

Mwirika.—Used when a patient passes blood from the rectum. It is ground

in water and given to the patient to drink.

Musumba.—A cough medicine. It is put in water with meat. The meat is eaten and a medicine soup is left, which is put in water and sent down the river and the cough departs at the same time.

Roranhata.—Used for curing zoni, i.e., irregular menstruation.

Kakombo.—To cure Chibayo, a stabbing pain in the side. It is rubbed on the

place of pain.

Dende.—This is a calabash, in size and shape like a large lemon and contains medicine which is used for Muhakata (divining purposes). This Dende has a long string along which it slides. One end of the string he attaches to the roof of the hut and the other end is held to the floor by a stone. He shoots the Dende to the roof and says: "Baba wakaswika pano nge kufara here?" (Did the father come here gladly?). The Dende then came down the string quickly, which meant "Yes." If it stops there at the roof it means "No." Before he sends it up he says: "Kwira, tiwone" (Go up and let us see). He carefully makes it answer what he desires. By making a show of holding it and then letting it come down he prevents detection.

Mutundwi.—This is the name of the basket (see photograph) which he uses for divination and for the detection of thieves. He prepares medicine in the basket and shaking his Hosho (see above) says: "Rewa" (talk). He then asks it about our journey. If he can lift the basket quickly it is a good answer. He then says: "Ngaremirire basa," "Gara zwakanaka" (sit very well). This is a confirmation of the answer, for he now cannot lift the basket. The medicine he puts in this basket is from the tail of a python—a python being powerful in moving by its tail.

Making the Image Talk.—He first puts empty castor oil seeds in his nostrils, then goes to the place where the image stands in his hut, and, kneeling, grasps its feet. He then begins to ask questions of the image. He asked many questions and gave correct answers in every case, but I had reason to believe that he knew

all the answers before he asked the questions. Such questions as :-

Did father walk with the inspector?

Did the donkey fall into the water and lose some things?

Did father try to cross the Pungwe with the donkeys and fail?

The image says father had a wound in his foot when he came to such a place. Such questions and statements he could easily have known from my boys.

He then claps his hands to thank the image for talking without receiving any pay!

The squeaking noise which the castor oil seeds make when he squeezes them in his nostrils gives the answer and represents the talking of the image.

D. SHROPSHIRE.

Africa: Bantu.

Schapera.

A Working Classification of the Bantu Peoples of Africa. By I. Schapera.

The name "Bantu" is primarily a linguistic designation, applied to a particular family of languages spoken over almost the whole of Southern and Central Africa up to about the Abyssinian frontier on the North-East and the Gulf of Guinea on the North-West, although interrupted here and there by enclaves of speech belonging to other language families. The Bantu language family includes well over 250 separate languages, all of which, however, have certain uniform and clearly-defined features in common. Of these the most characteristic are the system of alliterative concord in syntax, the division of nouns into classes according to the form of the prefix, and the absence of grammatical sex-gender. The occurrence of these features in any African language readily permits of its identification as a member of the Bantu language family.

By extension the name has also come to be applied to all those native peoples of Africa who speak one or other of the Bantu languages. For practical purposes this extended application may be accepted, although strictly speaking it derives no support from considerations of either race or culture. Racially these natives are generally regarded as being essentially negroes who carly crossed with Hamitic peoples. The mixed populations which resulted vary almost from one extreme to the other, although certain negro characteristics predominate, especially the structure of the hair. On the whole, however, these peoples cannot be sharply discriminated in appearance and build from the other negro peoples of Africa who have also been affected by Hamitic admixture, but who do not speak Bantu languages.

In regard to culture also they are in some cases inseparable from various other African peoples speaking languages belonging to different families. This is the case especially in the northern parts of East Africa, where both Bantu and non-Bantu peoples are found living under the same general form of tribal institutions and obtaining their subsistence in the same way. On the other hand, even amongst themselves the Bantu peoples show a good deal of variation in culture. They are divided into a considerable number of separate groups, many of which differ profoundly from one another in details of material culture, social organization and religion.

The following tentative classification of these groups is based principally upon factors of cultural homogeneity and difference, but has taken into consideration also historical connections and geographical distributions:—*

NORTH-EASTERN BANTU: found principally in Kenya Colony. This division includes the WaPokomo of the Tana River Valley; AKamba between the Tana R. and Mt. KilimaNjaro; AKikuyu round Mt. Kenya; WaTaita in the Taita Hills; WaNika (WaGiryama, WaDuruma, WaDigo, etc.) south of the Sabaki River; and the WaChaga on the southern slopes of Mt. KilimaNjaro. All these tribes have been considerably affected in culture by the Masai and other Nilo-Hamitic peoples, whose habits and customs they have to a large extent adopted.

LACUSTRINE BANTU: found principally in Ugarida and North-Western Tanganyika, round Lake Victoria. They include the BaGanda, on the north shore of L. Victoria, west of the Nile; BaNyoro (BaKilara), between the BaGanda and L. Albert; WaRuanda (BanyaRuanda), east of L. Kivu; WaRundi, north of L. Tanganyika; WaSukuma, in Usukuma, south of L. Victoria; and the WaNyamwezi, in Unyamwezi, east of L. Tanganyika. These tribes all have an Hamitic element, contributed by the BaHima and WaTutsi, who have been absorbed into the BaGanda, and are found as an aristocracy or dynasty inland on the north-west and north.

^{*} I am greatly indebted to my friends. Mr. E. Torday and Mr. J. H. Driberg, who have kindly read through the manuscript and offered some valuable constructive criticism. To Mr. Torday I am especially grateful for his assistance in regard to the Central and Western divisions. The final responsibility for the classification given above, however, rests solely upon me.

Eastern Bantu: spread over Central and Eastern Tanganyika, Northern Rhodesia, Nyasaland, and Portuguese East Africa north of the Zambesi River. They may be divided roughly into two main sections: the East Coast Bantu of Tanganyika and Portuguese East Africa, and the East-Central Bantu in part of Northern Rhodesia and round L. Nyasa.

The East Coast Bantu include the WaSambara (Bondei) and WaSagara of N.E. Tanganyika; the WaSango (WaRori), Wagogo and WaHehe of Central and Southern Tanganyika; the WaSwahili, a heterogeneous mixture of Bantu and Arabs, the former predominating, who are found along the whole coast line of Africa from Lamu in the north to about 16° S.; the MaKonde, between the Rufiji and Rovuma Rivers; the MaViha (MaBiha), between the Rovuma and Mtepwesi Rivers; and the WaMakua, extending from south of the Rovuma R. to the northern half of the Zambesi R. delta.

The East-Central Bantu include the WaNyika, north of L. Nyasa; the AwaNkonde, north and north-west of L. Nyasa, as far as the shores of L. Rukwa; the WaFipa, on the southern shores of L. Tanganyika; the ANyanja (including the ASenga, ASena, and AChewa), south and south-west of L. Nyasa, down to the Zambesi River; and the WaYao (AJawa), between the Rovuma and Lujenda Rivers east of L. Nyasa, who link up again with the WaMakua.

Southern Bantu: spread over Southern Rhodesia, the southern half of Portuguese East Africa, the eastern and central parts of the Union of South Africa, Swaziland and Bechuanaland Protectorates, the central and northern parts of South-West Africa, and South-West Angola. They may be divided into the following

four main groups :-

- (a) The Shona (MaShona) peoples of S. Rhodesia and of Portguese East Africa immediately south of the Zambesi R. as far as the Sabi R. They fall into: (1) the Karanga section, including the MaKorekore, WaTawara and WaBarwe, WaZezuru, WaManyika, WaBujga and WaMari, and the WaKaranga, who are spread over the greater part of S. Rhodesia and the western parts of P.E.A.; (2) the Rozwi (BaRozwi or BaNyai) section, which was paramount before the invasion of the AmaNdebele (MaTabele), and to which most of the above tribes were subject; it includes the WaNoe, WaShankwe and WaDuma, in addition to the BaRozwi, and is found scattered over S. Rhodesia, as well as in P.E.A. between the Mazoe and Zambesi Rivers; (3) the VaNdau of P.E.A., occupying principally the country between the Buzi and the Msilizwe Rivers, and met with also in S. Rhodesia, under the names WaDondo and WaSanga, in the Melsetter district.
- (b) The South-Eastern Bantu (Zulu-Xosa peoples), found principally in the coastal regions south and east of the Drakensberg Mountains, and extending from about the Sabi R. on the north into the Cape Province in the south. They fall into: (1) the so-called "Kaffirs" of the Eastern Province and Native Territories of the Cape, comprising mainly the AmaXosa (AmaNgqika, AmaGcaleka, AmaNdlambe, etc.) in the Eastern Province and Transkei, the AmaTembu (AmaHala, AmaTsatshu, AmaNdundwane, AmaGcina) in Glen Grey district and Tembuland, the AmaMpondomisi in Tembuland and East Griqualand, and the AmaMpondo in Pondoland, as well as the AmaXesibe of E. Griqualand, the AmaKwati of Tembuland, and the AmaBemvana and the AmaTshezi of Transkei; (2) the "Fingoes" (AmaFengu), including the AmaBele, AmaHlubi and AmaZizi, who now live for the most part scattered about among the "Kafir" tribes, and are the fugitive remnants of tribes formerly living in Natal and broken up during the great wars following in the wake of Chaka's military raids; (3) the inhabitants of Natal and Zululand, who were divided originally into more than 100 small separate tribes, each with its own name, but all of whom are now collectively known as the "Zulus" (AmaZulu). This name is derived from one of these tribes, the AmaZulu, by whose famous chief, Chaka,

most of the others were conquered towards the end of the 18th century and in the early years of the 19th century, and absorbed to form the Zulu nation. Other tribes of this section which came into historical prominence and which are still represented in Natal and Zululand are the AmaTetwa, AmaNgwane, AmaBaca, and AmaBomvu; (4) the BaThonga, (BaRonga, BaDjonga, BaNwalangu, BaHlanganu, BaBila and BaHlangwe), extending from Santa Lucia Bay on the Natal Coast up to the Sabi River on the north, and inland into S. Rhodesia (Bikita, Ndanga and Chibi districts) and Transvaal (Leydenburg, Zoutpansberg and Waterberg districts). In this section may also be included the VaChopi, along the coast north of the Limpopo R., between the course of the Inyarrime R. and the sea; and the BaTonga, in the coast district of Inhambane from C. San Sebastian to C. Corrientes.

From the Zulu section of this group have split off a number of other groups of tribes of great historical importance, who are now found living outside Natal and Zululand, but whose filiation is clearly marked in their language and customs, as well as in their history. These are the AmaSuazi of Swaziland; the AmaNdebele in Pretoria and Potgietersrust districts, Transvaal; the AmaNdebele (MaTabele) of Matabeleland, S. Rhodesia, who are quite distinct historically from the preceding group; the AmaTshangana ("Shangaans"), VaTua or AbaGaza of P.E.A. (Gazaland) and of S. Rhodesia (Bubi, Chibi, Ndanga and Melsetter districts); and the various groups of ANgoni (WaTuta, MaViti, MaNgwangara, MaZitu) found north of the

Zambesi R. in N. Rhodesia, Nyasaland and Tanganyika Territory.

(c) South-Central Bantu (Suto-Chwana peoples), occupy the greater portion of the high plateau north of the Orange River and west and north of the Drakensberg Mountains, extending in the west over the Kalahari Desert to the borders of South-West Africa, and in the north as far as the Upper Zambesi in the west and the Limpopo River in the east. They fall into (1) the BeChwana, including the BaRolong of Orange Free State and British Bechuanaland; the BaTlhaping, in the east of British Bechuanaland; the BaTlharo, in the west of British Bechuanaland; the BaNgwaketse, in a special reserve in the southern part of Bechuanaland Protectorate; the BaKwena, in the adjoining BaKwena reserve further north; the BaKgatlha, in the BaKgatlha reserve to the east, and also in the Pretoria and Rustenburg districts of the Transvaal: the BaManquato, in the northern half of Bechuanaland Protectorate, reaching up to the Upper Zambesi: the BaTawana, an offshoot of the BaMangwato, about the Botletle R. and L. Ngami to the north-west; the BaHurutshe, principally in the Marico district of the Transvaal; and the BaMagalete, adjoining them to the west. (2) The BaPedi, in Central Transvaal, north of Middelburg; the BaTlokwa, in the neighbourhood of Pietersburg N. Transvaal, and pervading the Zoutpansberg; the BaMojaji (BaLobedu and BaPhalaborwa), east of Pietersburg, near Duivel's Kloof; and the BaFokeng and BaKubung of Potchefstroom. (3) The BaSuto (BaSotho), concentrated mainly in Basutoland, but overlapping into the neighbouring regions to the west and south. They are made up of a large number of different tribes and remnants of tribes, most of whom are offshoots of the BaKwena, and are thus actually of Chwana stock. But in comparatively recent times these tribes were welded together by Moshesh into what is now the Basuto nation, and they are now quite distinct from the BeChwana, as have also become the BaPedi and kindred tribes.

(d) South-Western Bantu, spread over the central and northern districts of South-West Africa, and extending beyond the Kunene R. into Angola. They include the OvaHerero in the central districts of S.W.A., with whom may be classed the related OvaMbandieru in their eastern range, and the OvaTjimba in the Kaokoveld; the OvaMbo (OvaNdonga, OvaNgandjera, OvaKuanyamu, OvaKwangari, etc.) in Ovamboland and S. Angola; and the OviMbundu in the

Benguela and Bailundo districts of S. Angola, east of the Kwanza River.

Central Bantu: spread over North-West Rhodesia, a large part of Angola, and the central and eastern districts of Belgian Congo. In their southern range the tribes belonging to this division have some affinities with the Southern Bantu, as in the case of the BaRotse of N.W. Rhodesia, where we find part of the Aluyi and other peoples who belong to the Central Division, such as the MaSubia, BaYeye or MaKoba, BaNyengo or MaMbukushu, and MaMbunda, under the domination of Southern overlords (BaRozwi, hence the name BaRotse; and for a time also MaKololo of the South-Central group). The Valobale, Valuchazi, BaMbucela and Ngangela on the high plateau forming the watershed of the Kasai and Zambesi Rivers, and extending far into Eastern Angola, and the BaDjokwe or BaKioko, between the Kasai and the Kwango, also have some Southern affinities, while the BaIla of the Kafue R. in N.W. Rhodesia are immigrant Eastern Bantu mixed with a considerable Wemba element.

To the north of these and kindred tribes is the solid mass of Luba-Wemba peoples, extending, roughly speaking, between Lakes Tanganyika and Nyasa in the east to the Kasai River in the west. To these belong the BashiLange and BanaLulua of the Kasai district, the BaSonge between the Lubi and the Lomami, the BaBemba (A Wemba) and BaBisa, in N. Rhodesia, to the north and north-east of L. Bangweolo. and the BaRua, the latter being a territorial designation for the BaLuba-Hemba. Further north, in the region of the Kasai-Lulua confluence, and east of the Loange R., is the domain of the BaKongo-BaShilele-BuShongo (BaKuba) group, now under the rule of an alien Sudanic king and aristocracy. North of the Sankuru R. and part of the Kasai R. is the medley of tribes called BaSongo Meno, which is transitional between the Luba-Wemba group and the BaTetela (including the MaNyema, BaKusu and BaNkutu), who dwell north of 40° S. between L. Tanganyika and Lac Leopold II. They were cut in two about five generations before the end of last century by a wedge of Turumbu, Topoke, Lokele, WaGenya, and WaRega, emigrants from the BaNgala-BaLolo group, which comprises various tribes (WaNgata, Boloki, Ngombe, Bwela, Budja, Mongo, BaPoto, BaSoko, BaBali, etc.) living on the shores of, and some way inland from, the banks of the Congo on its course north of the Equator.

To the north of these are the Ababua and kindred tribes, which are already much mixed with Sudanic elements, and, in consequence of the encroachments of the Azande, have in many cases adopted a non-Bantu speech, while some of the invaders have been absorbed in the Bantu element. These tribes may be described as the transitional northern fringe of the Bantu.

Western Bantu: were, to within about two centuries (possibly more, certainly not less) of European discovery, the people living between the Kunene-Kwanza watershed (ca. 12° S.) and the Kamerun mountains (ca. 4° N.); and were divided by the River Congo and the Lower Kasai into a Southern and a Northern section.

The Southern section, dominated by the kingdom of Kongo, was extended, not only politically but also culturally, beyond the Congo in the 14th century, absorbing the tribes up to 4° S. such as the BaVili, BaYombe and BaSundi. Its eastern border is sharply defined by the R. Loange (20° E.) to about 8° S.; further south it extends roughly to about the Lulua R. The exact southern limit is vague: the formation of the Lunda empire, the Jaga raids, and the subsequent encroachments of the BaDjokwe (BaKioko) have played havoc with the tribal groupings. The principal peoples are the BaBunda, WaNgongo, BaMbala, BaYaka, BaHuana and BaYanzi between the Loange and the Kwango; BaLunda, in the upper basins of the Lulua and Kasai rivers; ImBangala, between the Kwango and Kwanza rivers; BaPende and BaKwese in the Congo between the Upper Kwango and Kwilu Rivers; and the BaKongo between the Kwango and the coast south of the Lower Congo.

The Northern section of the Western Bantu was separated from the Southern section by the invasion of other Bantu peoples belonging to the northern transitional

section previously mentioned, and coming probably from the Welle region. These peoples were the BaTeke (Anzingue) and the Pangwe. The former, who now occupy a vast region on the right bank of the Congo, below and above Stanley Pool, extending inland as far as the upper reaches of the Ogowe and the Alima, were already a powerful kingdom early in the 16th century, capable of waging successful wars against the kingdom of Kongo. The Pangue (Fang), coming in their wake from a part of the Welle valley just a little further north, have led a roving existence, and in their various expeditions and temporary conquests have left their indelible mark on most of the indigenous tribes north of the Ogowe, such as the Bakela (Bakalai) and Bakota of Central Ogowe; the Bulu and BaSheke of Lower Ogowe and Gabun; and the ADuma. Further north, in the Kamerun region, we meet again with the purer type of this section, among the Bube of Fernando Po, the Duala of the Kamerun R., the BaKoko, BaKwiri, BaKundu and the Mpongwe of the inland. Further north still the Sudanie influence becomes increasingly prominent until we meet with the tribes commonly described as Semi-Bantu, who fall outside the scope of this classification. I. SCHAPERA.

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Sociology.

Driberg.

Inheritance Fees. By J. H. Driberg.

There is one element in primitive marriage which appears to have escaped general observation. I refer to what, in conformity with native terminology, may be called inheritance fees, or the dues paid by the inheritor of a widow to the responsible member of her family. I have found that such a fee is compulsory among three unrelated peoples, the Lango of the Uganda Protectorate and the Didinga and Bari of the Sudan, and have no doubt that in very many cases in which our records are silent further enquiry would establish their existence. The significance of these fees had not occurred to me when I was collecting my material, which is accordingly not as complete as might be wished.

The facts can be simply stated. Among the Lango a widow is normally inherited by a brother of the deceased or by his sister's son, and in either case one bull (called bull of inheritance) is payable by the new husband to the woman's family. Subsequent children are considered to be children of the new husband. The heir differentiates her from his other wives, when necessary, by speaking of her as his inherited wife. Among the Didinga a brother of the deceased is the technical heir of the widow, but, failing a suitable brother, the deceased's mother's sister's son or the deceased sister's son inherits the woman. (A son may only inherit the widow if she is young and not his own mother, and, generally speaking, the son may be excluded.) An inheritance fee (called cattle of succession) varying from a few goats to ten head of cattle is payable to the woman's family. If the deceased's brother inherits the woman, he pays this fee himself and any subsequent children are his own; but if the sister's son or the mother's sister's son inherits the woman, the fee is paid by the heir to the property of the deceased, viz., his son, and any children who may subsequently be born are considered to be the children of the deceased, and are given names from both the deceased husband's and the new husband's families.

Among the Bari the inheritor of a widow, if he is a brother of the deceased, pays one cow and one bull (or one cow and ten goats) as an inheritance fee to the woman's father or to her next nearest relative, and keeps any subsequent children as his own. If the sister's son inherits, the fee is payable (as among the Didinga) from the estate, and any children are considered the children of the dead man. I have unfortunately no note of the technical term applied by the Bari to this payment.

What is the significance of this inheritance fee? The original marriage consideration was discharged in full by the dead husband, and the woman became his wife in exchange for the cattle or goats which ratified the marriage contract; so much so that among the Lango at any rate she definitely entered the clan of her husband. One might reasonably assume, therefore, that no further payment would be due to her family, and at first sight the inheritance fee appears to be an anomaly.

Further consideration, however, shows that the marriage contract in addition to establishing the relations between husband and wife also defines the social and economic status of the children. This is, indeed, its most important function in communities in which the importance of an heir is intensified by the implications of ancestor worship. In fact the marriage is not considered complete till after the birth of the first son.

In a Lango marriage an essential element of the bride-price (to use the conventional, though misleading term)—the roya me ot, "the heifer of the house" paid to the bride's mother—is not delivered by the husband till the first child is born. A bride is not called wife till after the birth of a child. Before that, from the payment of the initial bride-price to the birth of her child, she is designated by the term alerañ (borrowed from the Nilo-Hamitics): after the birth of her child she is called dako or wife (lit.: one who has born a child). She then assumes special ornaments and dress, significant of motherhood, not of wifehood, whereas formerly she continued to wear the costume of an unmarried woman. On marriage she lives in her husband's bachelor hut, to which he used to take his girl lovers; only after she has born a child and has become a wife in actual fact does he build her a separate house and granary and give her her own courtyard and the social position of a married woman.

This all indicates that concrete motherhood is part of the marriage contract and that the marriage contract is not fully completed till the birth of a child. The roya me of definitely establishes the affiliation of the child and marks its final transference to the husband's family, just as in the event of a divorce the whole bride-price is returned complete with issue, and the woman returns to her family with custody of the children. It is significant, however, that even after the lapse of several years the ex-husband may recover his child by paying a roya me pit (heifer of upkeep) to the family of the girl or to her new husband.

The Didinga—an unrelated tribe, as I say—afford an almost exact parallel. Both the bride and bridegroom are nyateran, a term which is also applied to betrothed lovers or to a girl living in tentative concubinage with a warrior. Only after the birth of their child do they become technically husband and wife. The bride's first child is born in her mother's house, and only then does the husband build her a house and start a new village. Before this they share the house of the bridegroom's mother. Furthermore when the young husband and wife visited the latter's mother they slept in the mother's hut, and were permitted marital intimacy in her presence; they had, that is, the status of lovers. After the birth of a child, however, when they visit the wife's mother, she has to vacate her house in their favour, signifying that he is now completely her daughter's husband. It is relevant that, though a husband may never divorce his wife under any consideration, a wife is permitted to leave her husband before she bears him a child and the bride-price paid by him is returned in full. No divorce is permitted, however, after the birth of a child.

An interesting sidelight is thrown by a Bari custom. If a man marries without paying any bride-price—and it appears that it is possible to perform the ceremonial side of the contract without it, making the couple legally man and wife—the woman's relations take all the bride-price paid at the marriage of the first daughter of the union. If there is no daughter, a son is kept by the wife's family till ransomed by some portion of the unpaid bride-price. There is no question of legitimacy, as all the children are legitimate, but of legal filiation.

Orde Browne* gives us further corroboration and shows us that on childbirth a fertility payment is due in addition to the bride-price which has already been paid. "The initial sum on marriage," he writes, "is subsequently supplemented by further payments on the birth of children." There can be no doubt that it is this payment which secures to the father title to his own children.

Among the Chagga a man marries a divorced woman without paying any bride-price, but should she bear children and bring them up the man has to pay the whole ngosa.† Even when marrying a spinster a Chagga husband pays only an instalment of his wife's bride-price; "nothing further is paid until children "are born to the couple."‡ Gutmann confirms this when he says that the bride-price is paid partly to redeem the children from the woman's clan, though among the Chagga, as among the Lango, the woman leaves her own clan and enters that of her husband. That is why, he adds, gifts are paid partly before and partly after marriage, and a man who remains childless is not obliged to complete payment of the bride-price.

All this appears to be peculiarly relevant to the question of an inheritance fee. The original husband paid not only the bride-price but sufficient to give him the title to his children. The bride-price cannot be demanded again from anyone, so long as the original bride-price remains with the woman's family. But when, owing to the death of her husband, she goes to another man, his heir, that other has no title to any children whom she may bear him, unless he pays a fee giving him a legal right to them. The converse of this is to the point. Among the Lango if a bride dies before giving birth to a child, the husband may claim a younger unmarried sister; but though he has to pay no further bride-price, he has to give her mother a bull, and the only reason for this payment can be that without it he has no title to her children.

^{* &}quot;The Vanishing Tribes of Kenya," p. 75.

[†] Bruno Gutmann, "Das Recht der Dschagga," p. 131.

[‡] C. Dundas, J.R.A.I., LI, p. 240 Bruno Gutmann, op. cit., p. 132.

If this is so, and I can see no alternative explanation of an inheritance fee, it follows that where no such fee is paid the heir to the widow has no claim on the children. That is why among the Didinga, as we have seen, the fee is paid, not by the mother's sister's son or the sister's son, but by the heir to the estate—that is to say, it is paid out of the property of the dead husband. For in this case the children born to the heir of the widow are considered to be the children of the deceased, and though we might suppose that the original bride-price would cover such posthumous children, yet in actual fact the fee is paid out of the estate not only to reaffirm the dead husband's claim, but also because the fact of physiological paternity demands this reaffirmation in order to adjust the situation by a legal fiction.

Over the greater part of Africa the heir to a widow has no claim on the children, who are generally held to be the children of the dead husband. The question of the payment of an inheritance fee by the heir does not arise in such circumstances. But wherever the heir has a direct title to his children by an inherited widow, we should expect that some fee to her kindred would be obligatory. Our authorities are unfortunately silent on this point, but it is likely that further investigation may throw light on the matter. It is the sort of point which might easily pass unnoticed. I never suspected the existence of an inheritance fee among the Lango until an accident gave me the clue, and it is possible that others have not been so fortunate as to have the clue thrust before them.

Something very like it is, however, recorded among the Wahehe.* "When a brother takes over a wife," we read, "he must exchange small gifts with her relations—e.g., two or three hoes for one goat—otherwise he is not considered legally to have taken her." The Chagga heir on the other hand "to prevent the dead from being offended by a levirate marriage and from killing the wife sacrifices to him a goat, by which act he purchases his conjugal rights."† This payment appears to come under a different category, and is analogous to the goat paid by a Bari for the adulterous assistance given to a sterile brother.

J. H. DRIBERG-

REVIEWS.

Pacific: Technology. Beasley. Pacific Islands Records; Fish Hooks. By H. G. Beasley. Seeley, Service, 1928. Introduction by T. A. Joyce. Pp. xxiv + 133. $11\frac{1}{4} \times 8\frac{3}{4}$. Price £5 5s. Mr. Beasley has earned the cordial thanks of ethnologists for having produced this important monograph upon the fishhooks of the Pacific Islands. He has ably brought together a great mass of material and, although his own treatment of the subject is based upon a geographical grouping, he has supplied the means whereby the various types of fish-hooks may be collated and rendered of value for study on wider ethnological lines. This is just what is urgently wanted. Every human appliance should be so treated and form the subject of a monographic corpus, in which the description of the various local, and accurately localised

types may be assembled together and made readily accessible for comparative study. The author's labours in collecting the material for this volume must have been considerable, as it has had to be sought out in many museums and private collections, as well as from a very scattered literature. The author's wide knowledge of the technology of the Pacific well equipped him for this work. He has been satisfied to serve as a compiler and has avoided the temptation to elaborate theories from his collected material; and this may count for merit, since it is chiefly reliable facts which are wanted, to serve later as material for theories of dispersal and affinities.

The volume should appeal in particular to the administrators of museums, much of whose material requires identification and accurate localisation. Many an

^{*} A. G. O. Hodgson, J.R.A.I., LVI, p. 47. † Bruno Gutmann op. cit., p. 52.

unlabelled fish-hook will now be able to be assigned with confidence to a definite locality and people, in some cases even to a particular island; and many a label laconically stating "locality unknown"or, worse still, giving a wrong provenancemay be replaced by one supplying reliable information. The illustrations are excellent and very numerous, and the survey of Pacific types is comprehensive and includes many examples which are but rarely to be seen in collections. Several of the types recorded are now obsolete; most of them are rapidly becoming obsolescent. Hence, this volume will prove an invaluable record of a group of artefacts which ere long will fall completely into the category of "bygones." A very practical illustrated reference list is given of the local variations in form of the points* of composite spinner-hooks, a schematic list which is valuable for quick reference. very interesting chapter is appended dealing with unusual types and ornamentally conventionalised and symbolic fish-hook derivatives. Also, to complete this interesting survey, notes are added upon "forgeries," which are being increasingly issued in order to meet the demand for rare types.

The edition of this volume is limited to 250 copes, and, since it is very unlikely that this will prove sufficient, we may hope that a second edition may ultimately be issued. A re-issue, moreover, would enable a number of very necessary corrections to be made. The text is, unfortunately, marred by many avoidable errors, which might have been eliminated by efficient proof-reading, since most of them are obviously mere slips. Many of the errors are harmless enough, but they are un-I mention sightly in so fine a volume. some of them with an eye upon a possible second and revised edition. "Bownitch";
(plate 47) instead of "Bowditch";
"Strongs" (plate 159) for "Strong";
"Monihiki" (p. xii) for "Monahiki."
Ysabel is printed "Yasbel" throughout the text and in the index. Trobriand al-o appears throughout as "Trobirand." References are not always correctly given, e.g., Hardy's book "The Savage South Seas" is incorrectly dated 1897, instead of 1907; "A Naturalist in the Celebes"
(p. 65) should read "... in North Celebes," and the date 1889 should be

"The Journal of the Ry. Anthro. Inst." is not correct for references to volumes

dating before 1907, prior to which the Institute was not a "Royal" Society. Personal names have proved a stumbling block here and there. "Musée de St. Germaine" (plate 130) contains two obvious errors. Labilladier (pp. 20, 62, 78 and index) occurs for Labilladière. The author is occasionally impartial in his renderings; for instance, "Im-Thurn" (p. 103) and "Everard-im-Thurn" (p. 68), both of these being incorrect. His reference to a typical crustacean as a "fish" (pp. 72, 73) is zoologically disturbing.

The Index badly requires revision and some extension. There is a lack of system in indexing personal names, many of which, though not all, have to be sought under categories headed "Dr.," "Rev.," "Sir" or "Mrs." Surely, the surnames should throughout be recorded alphabetically in their appropriate places, the prefixes being of lesser importance.

In commenting upon such blemishes, I am not urged by a desire to criticise, but by the hope that, by careful revision of the text, full justice may be done to a very praiseworthy and welcome accession to ethnological literature.

HENRY BALFOUR.

Prehistory. Childe,

The Most Ancient East. By V. Gordon Childe. Pp. 258. 66
Plates 24, illustrations 86, 1 map. Kegan

Paul. 1928. Price 15s. Professor Gordon Childe's book must have been first written as a course of lectures to students in his own University, otherwise he would not have begun with the words :- "Barely a thousand years " ago Scotland and the rest of Europe." This smacks of that narrow parochialism which one associates with Scotch archieology, and gives rise to a certain apprehension lest the same narrow range of vision may be found throughout the whole work. The apprehension is quite groundless, the trail of the lecturer is visible only in this one place and in the occasional use of unrequired adjectives. Professor Childe has brought together groups of facts which, to the general reader, have hitherto appeared unrelated, and has given a comprehensive view of the present state of knowledge attained by the most recent discoveries in Egypt, Mesopotamia, and India. It is a book which was much needed; and Professor Childe's wide knowledge and brilliant capacity for grappling successfully with the problems of prehistory point him out as the right person to write it. main thesis is that to understand the prehistory of Europe it is necessary to turn to the great civilisations of the Near

^{*} I prefer to call this part of a fish-hook the "point," instead of using the term "barb," which is more usually employed for the secondary reverted projection.

and Middle East, and take account of their early beginnings. In the second chapter he explains very shortly the climatic conditions under which agriculture and domestication of animals would first begin; in other words, where civilisation would first arise. This is well and convincingly written, but a map would have greatly helped in the elucidation of the Four chapters are devoted to early Egypt, tracing the rise of its civilisation from the primitive Badarian culture to the magnificent period of the Third Dynasty. In these chapters Professor Childe gives a short and succinct account, making a framework into which a student may fit any further information. He does not, however, always distinguish the foreign elements from the native Badarian. The tulip-beaker of black ware with incised lines is clearly foreign, as it is made of a fat black clay unknown in the Nile Valley. and is of the same material and type of decoration as the "biscuit-box" forms. The four-handled vase (Plate IIIb) is probably also foreign; possibly from Syria, where the type survived or re-appeared considerably later.

Professor Childe is at his best in the account of the Mesopotamian culture, the sequence of the different civilisations being concisely and lucidly set out. His explanation, that the difference in the development of Egypt and Babylonia was due to the difference in geographical conditions, is extraordinarily clear, though very shortly In a few short sentences he shows how Egypt, self-contained and hemmed in by deserts, "enjoyed a fortunate isolation." whereas Babylonia, by the very nature of the country, was dependent on foreign made and at the same time open to foreign incursions. Professor Childe insists throughout on the Eastern connections of the Mesopotamian civilisation. As he points out, in the earliest times there was a great cultural complex extending from Bushire on the Persian Gulf northwards as far as Tell Zeidan. The conclusion to which he comes, when reviewing the facts, is that so wide a spread of the same culture can only be explained by a series of colonies hiving off from the parent stock. discussing the origins and connections of the Second Civilisation, Professor Childe points out that the Oriental culture of that period "was, like European civilisa-" tion to-day, an organic unity." chapter on Sumerian civilisation is necessarily concerned in a great measure with the recent discoveries at Ur and their place in the cultural development of the The account of the civilisation of the Indus valley is all too short, though crammed with facts and full of suggestive

detail. In the last chapter there is a discussion as to the "original focus of "metal-working" and "the cradle of food-production," which Professor Childe is definitely of opinion was in the East. and he traces these culture complexes from the Near East westwards and northwards into Europe, and eastwards into Asia. The book is one which every student of prehistory should possess, for the clearness of exposition and the wealth of detail. It is given to few men to seize the essentials in so complicated and involved a subject. and place them plainly before the reader in the way that Professor Childe has done so brilliantly. The chief fault of the book is the want of adequate maps.

M. A. MURRAY.

Religion. Summers.

The Vampire: his Kith and Kin.

By Montague Summers. London:

Kegan Paul, Trench, Tribner & Co., Ltd.,

1928. Pp. xv + 356. With 8 plates.

Price 15s. net.

It is not easy to estimate fairly the value of this book by the Rev. Montague Summers. In his "History of Witchcraft and Demonology" the author showed himself incapable of judging between different kinds of evidence, and in the present work the same odd mixture of learning and almost childish credulity is apparent. If we understand Mr. Summers rightly, he believes in the reality of vampires; indeed, he castigates certain of the earlier ecclesiastical writers for the mild scepticism that they occasionally display. According to Mr. Summers, it is not difficult to recognise the vampire when a coffin is opened. The corpse lies within. fat and sleek; the face is ruddy and coloured as when alive; the eyes are lit up with a baneful glare, and the snarling lips reveal teeth ivory white and sharp as razors. From the mouth clotted gouts of blood are seen to drip, and often the horrid signs of a recent feast are to be discerned upon the cerements of the tomb. In order to explain how the vampires leave their coffins upon their nightly excursions, Mr. Summers hints at the "explanation" of modern spiritualism with its alleged materialisations and ectoplasm. Indeed, he is so much at home in these dubious realms that he fails altogether to appreciate the anthropological significance of the belief in vampires. It is true that he has a section upon vampirism in Asia and elsewhere, but even here he does not mention, as far as I can see, the famous Berbalangs of Cagayan Sulu, whose horrid habits might have been thought to be just those which Mr. Summers would especially delight in describing.

In spite of these deficiencies, however, the book has value as a collection of sources. The author gives his references, be these from Aristotle or from the News of the World, and when the complete history of vampirism is written its author will find Mr. Summer's collection of ecclesiastical authorities very useful.

E. J. DINGWALL.

France: Archæology. Capitan, Peyrony.

La Madeleine, son Gisement, son
Industrie, ses Œuvres d'Art. Par L.

Capitan et D. Peyrony. Pp. 125. 19 plates
and 70 text-figures. Paris: Publications
de l'Institut International d'Anthropologie,
No. 2. (Librairie Emil Nourry). 1928.

The process of completing the excavation of this famous rock-shelter has been a long one, and, indeed, this memoir does not bring us to the end of it. In the main the authors deal with work carried on by them from 1910 to 1913, but there is a concluding description of a burial, of a child from 5 to 7 years of age, found in 1926. The body had evidently been "saupoudré d'ocre "plus ou moins, vraisemblement peint "avec cette matèire." Shells and pierced teeth were found at the head, the neck, the elbows, the wrists, the knees, and the ankles.

The general result of the excavations is to confirm existing views as to the development of culture during Madel inian times. Of the three layers which were well-defined, only the lowest contained sculptures in the round, the outstanding pieces being a fine carving of a bison, with head looking backwards, in reindeer antler. The middle layer contained animal carvings in relief, and geometrical designs were common. In the upper layer geometrical designs predominated, and the animal carvings were less successful. Of spear and harpoon heads of reindeer antler, the lower layer had primitive types, in the second they were well finished, with long uniserial barbs, and in the upper layer the barbs were in two rows. The appearance of the numerous "bâtons de commandement" that were found tends to suggest that their interpretation as shaft-straighteners is likely to be correct. If they are "chief's staves," then the chiefs were either extraordinarily numerous, or very careless with their insignia.

In debris left by previous excavators, which could be identified as belonging to the upper layer, were found a number of blocks of limestone and schist, with animal engravings, chiefly of reindeer. These blocks form the subjects of nineteen out of the twenty plates in the memoir. Whilst giving due praise to the excellence

of the illustrations, both in the text and in the plates, it may be suggested that it would have been very much better if a short description of the engraved stones had been given on the plates themselves, or even in a general "description of plates." As it is, the reader has to find the place in the text where the descriptions are included. In future issues of these admirable publications it may be hoped that one of these very simple and usual methods will be adopted.

H. S. HARRISON.

Crete: Archæology.

Evans.

The Palace of Minos at Knossos:
a comparative account of the successive
stages of the early Cretan civilisation as
illustrated by the discoveries at Knossos.
By Sir Arthur Evans, D.Litt., etc., F.R.S.,
F.B.A., Royal Gold Medallist, R.I.B.A.
Vol. II, Parts 1 and 2. London, 1928.
Pp. xxii-xiv + 844. 2 coloured frontispieces, 5 coloured plates, 3 plans in pockets,
551 figures and maps. Price £7 7s. net.

The second volume of this great work exceeds the first in bulk and importance; its bulk is so great that the publishers have wisely divided it into two parts. The first volume treated of early times and carried the story of Knossos down to the occurrence of a disastrous earth-quake towards the close of the Third Middle Minoan period. This volume opens with the restorations effected after that catastrophe and describes the palace as it was during the First Late Minoan period. All the architectural details of the palace of this time are most fully described, with a wealth of comparisons drawn from remains found elsewhere in Crete or in Egypt. as well as such objects of this period as have been found on the site itself. The illustrations are not only numerous, but reproduced with great

A considerable section of the first part is devoted to recent discoveries, made since the appearance of the first volume, but relating to earlier periods. Notable among these is a late neolithic house, in which was found a copper axe-head, showing that here, as one suspects elsewhere, what has hitherto been termed neolithic belongs more properly to an age when copper was known, though scarce. Another interesting discovery mentioned is the great traderoute between Knossos and the Mesara Plain, and, after describing this, the author goes on to discuss the trade relations between Crete and the surrounding This discussion is one of the most interesting points in the volume, and the evidence for the spread of Cretan commerce during the copper age has been marshalled in a most masterly fashion. This, again, leads to an account of Cretan relations with Malta, in which the author expresses his views as to the age and purpose of the great megalithic sanctuaries for which that group of islands are famous.

This volume is of surpassing interest, not only to those who require information as to the early civilisation of Greek lands, but to all who are working on the early cultures of the Old World. H. J. E. P.

Siberia, etc. Jochelson, Mathiassen.

(1) Peoples of Asiatic Russia. By Waldemar Jochelson. Amer. Mus. Nat. Hist., 1928. Pp. 259, figures 52, maps.

(2) Archaeological Investigations in Kamchatka. By W. Jochelson. Carneg. Inst., Washington, Pub. No. 388, 1928. Pp. 88,

plates 19, figures 83, maps.

(3) Material Culture of the Iqlulik Eskimos. By Therkel Mathiassen. Report of Fifth Thule Expedition. Copenhagen, 1928. Vol. VI, No. 1. Pp. 242, figures 203, map.

These three volumes all bear on the problem of the relation between the cultures and native races of North-Eastern Asia and those of North-Western America. But the first one has a much wider bearing, for it is not only an ethnological account of the races found in Asiatic Russia. but it includes those who have come westward into Finland, Bulgaria, the Caucasus. Turkey and adjacent regions. The survey of the many fragments of mixed peoples in the Caucasus, for example, is of great Jochelson groups the races into Mongoloids, including Finns, Ugrians, Lapp, Samoyed, Yakut, Tantars, Buryat and Tungus; and "Americanoids," including the Chukchee, Koryak, Kamchadal and Asiatic Eskimo. The nations of Turkestan, the Asiatic Steppes and the Iranian peoples are also considered. This broad survey furnishes valuable material bearing on many problems. Jochelson is inclined to adopt a modification of the hypothesis of Boas that the trek across Behring Strait to America began during the Pleistocene, in one of the inter-glacial periods, these people being driven southward by the ice, with a later post-glacial backwash into Asiatic territory. This view is supported by the archæological findings in Kamchatka (2) and by somatological comparisons of the Kamchadal and other races with the American Indians and Eskimos.

This work (1) sketches the history and pre-history of each race so far as known, thus giving a picture of the innumerable shiftings and minglings of peoples in Central and Northern Asia. The evidence it affords will enable anthropologists to take a wider view of the races found in

The presence of the Caucasoid Europe. Ainu in North-Eastern Asia among Mongoloids has long been a puzzle. tends to show the presence in former times of a chain of white tribes, such as the Dinlin and the Wusun of Chinese annals, stretching across Northern Asia, some of them blue-eyed blonds, and thus connecting with the European Nordics. Similarly, a more eastern origin of the Alpine race is This work will add to the suggested. high reputation of the author, who is already well known for his contributions

on the peoples of Northern Asia.

The third volume is a study of the Iglulik Eskimos, who occupy roughly northern Baffin Land, the Melville Peninsula and the region around the mouth of Hudson Bay on the western side. author lived and travelled in this country of the Central Eskimos for two years, 1921-23. The country is described and a very full account is given of the natives, their weapons and implements, methods of hunting, sledge routes, clothing, and every phase of their lives. They frequently take long journeys, build snow houses in winter, and use tents in summer, caribou hunting is of great importance to them, and they Their culture is have many taboo rules. similar to that of the Coronation Gulf Eskimos, but differs from that of the western Eskimos and the Greenlanders. Certain features of it are believed to be survivals of the early Thule culture, which formerly extended all across the American Arctic. One such survival is the use of old house ruins as qurmat or autumn houses; another is the skin lining of snow houses, and various others are cited. These were more numerous a century ago, and it is believed that there has been a gradual transition from the ancient Thule culture to the present conditions, with more survivals here than elsewhere. Iglulik culture is regarded as an inland one which has acquired a marine facet and has been derived from that of the Caribou Eskimos on the Barren Grounds.

It is to be hoped that the blood groups of these Eskimos and those around Coronation Gulf will be taken, as it may furnish important evidence of their origin and relationships. R. RUGGLES GATES.

China: Ethnology. Chi Li.

The Formation of the Chinese People: an Anthropological Inquiry.

By Chi Li, Ph.D. (Harvard), Lecturer in Anthropology in the Tsing Hua Research Institute. Pp. 283. 78 distribution maps, 78 tables, and an Appendix. Cambridge, Mass. Humphrey Milford, at the Oxford University Press, for the Harvard University Press, 1928. Price 28s. net.

This brilliant critical analysis of all the available data, published in trenchant and lucid English by a Chinese anthropologist who is also a classical scholar, deserves a hearty welcome. Dr. Li cheerfully recognises the formidable difficulties of this inquiry, and merely claims to "show the " complexity of the problem, and the possible ways of solving it," but his demonstration is original in method and testifies to laborious research scientifically carried out, whilst his analyses, mathematical and critical, of the anthropometrical material and historical data are those of a penetrating and swift intellect. He has collected all the anthropometrical data published about the people inhabiting China proper, reduced them to terms capable of comparative analysis, and then worked out the ethnographic correlations mathematically. To control these anthropometric findings he has analysed the records of the building of 4,478 protective city walls between a period ending in 722 B.C., and 1644 A.D. (3,035 of which are dated constructions) and deduced from this wall-building activity "the slow but " steady movement of the population" into the area occupied by the modern Chinese. And he has likewise analysed the geographical distribution, from 2282 B.C. to 1644 A.D., of the ten surnames occurring most frequently in the 50,000 biographical notices in the genealogical records dealing with 4,000 different surnames recorded in the Chinese Encyclopædia, illustrating the direction and trend of the migrations deduced therefrom in a series of maps compared with the graphs illustrating the wall-building. Then he has compared both sets of results, which agree in demonstrating (i) that the movement of the historic group considered as "Chinese" by the Chinese historians (he calls it the "We" Group in contra-distinction to the "You" Group comprising barbarians, aborigines and foreigners) (a) before 206 B.C. was limited to the north of the Yangtze, (b) was subsequently mainly in a south-easterly direction up till 1280 A.D., (c) was then dominantly south-westerly up till 1644; (ii) that the Yangtze and Yellow rivers have consistently served as the arteries of Chinese civilization, being "constant factors associated with all "the great historical movements of the " Chinese"; (iii) that the Chinese "Wegroup" population was concentrated in the north-east and central-east at about the beginning of the Christian era, but subsequently decreased in the north-east and central-east while it increased south of the Yangtze-especially markedly during the first century and a half of the Christian era, and thus corroborating independent historical records of invasion in the north-

central-West and conflicts with aboriginal tribes in the South. Finally, analysing his three sets of results, Dr. Li finds (A) that (taking 722 B.c. as the starting point of his enquiry) there are ten clearly definable elements in the make-up of the modern Chinese. The "silk-wearing, rice-eating " and city-building" We-group was enlarged, after the beginning of the Christian era, by the incorporation of the horse-riding, kumiss-drinking, flesh-eating Hsiung-nus; the yak-driving Ch'iangs; the pig-rearing Tungus and the cattle-stealing Mongols, while it absorbed and incorporated the tattooing Shan-speaking group, the cre-mating Tibeto-Burman-speaking group, and the Kanlan - dwelling Mon - Kmer speaking group in the course of its expansion south of the Yangtze. (The Manchus, a branch of the Tungus, came in after 1644 A.D., which the author takes as his limit this side of the Christian era.) (B) That, although the number of these ten elements varies from three to eight in different provinces, certain provinces are demonstratably homogeneous ethnographically. (C) That the anthropometric characters of different provinces can, to a considerable extent, be correlated with their ethnographic elements, so that, in general, it is true to say that of the basic elements of the modern Chinese the historical Chinese "We-group," with its geographical centre in East China, is brachycephalic-leptorrhinic; the Tungus group, with its centre in the North, is dolichocephalic-leptorrhinic; the Tibeto-Burman-speaking peoples in the West are dolichocephalic-platyrrbinic, and the Mon-Kmer-speaking group in the South brachycephalic-platyrrhinic, whilst interspersed among these groups are others whose anthropometric characters cannot be determined, viz., the Hsiung-nus in the North, a dwarf element in the South, and Mongols -- "if, indeed, there are any "-- all over China proper. (D) That the historical tendency (now, apparently, inoperative) has been for the Tungus to replace the historical Chinese "We-group," and for these to replace permanently the other major elements, thus suggesting the probability of a continued leptorrhinization of the South and a rebrachycephalization of the North. The final word of this Chinese doctor of philosophy, however, is: "I am prepared to modify my opinion on the basis of further research." We hope this painstaking and original investigator will find opportunity and methods of extending his researches to the prehistoric period. And that in future publications he will put us further in his debt by providing-an index! V. C. C. COLLUM.

CORRESPONDENCE.

Egypt : Archæology.

Ancient Reaping Hooks.

To the Editor of MAN.

between SIR,-The comparison ancient Egyptian reaping-hooks and jaws of animals has occurred to many minds. but there is the primary difficulty of the impossibility of ox-teeth cutting knife-like through straw. If the flints constituting the sickle-blade be examined, they will be found to be polished bright by the sweeping contact with the dry straw, which has a hardness of its own and would only be bruised and torn by ox-teeth in a jaw wielded sickle-fashion.

Apart from this, the earliest known form of sickle is the neolithic one found by Miss Caton-Thompsom in the Fayum, which is straight (see J.R.A.I., Vol. lvi, Pl. XL). A handle may have been added to this in the course of ages, for convenience, and the whole eventually developed into the graceful tool made of a single piece of wood which we know in the age of the New Empire and is illustrated by Mr. Marples (Man, 1929, No. 37).

The neolithic sickle may be considered as exemplifying the method of employing microliths, by attachment to wood, or even bone,

as in the case of the harpoons to which they have been found attached as barbs

I am, Sir, Your faithful Servant. G. D. HORNBLOWER.

March 11th, 1929.

Ethnology.

The Origin of Races.

To the Editor of MAN. SIR,—In his very interesting Huxley Memorial lecture, Sir Arthur Keith states that from a mixed crowd of Britons he could identify from physical appearances a con-siderable proportion of Welsh, Irish, etc., and argues from this that the Welsh, Irish, etc., are evolving distinct racial types.

He could also, no doubt, identify from physical appearances a considerable proportion of lawyers, soldiers, etc., but would hardly argue that lawyers and soldiers are

evolving racial types.

The fact is that language, religion and training all leave their traces on the physiognomy, and it is often possible to diagnose a man's "race" from his physical appearance although he exhibits no true racial characteristics whatever.

Yours faithfully,
RAGLAN.

March 3rd, 1929.

ANTHROPOLOGICAL NOTES.

The Gesellschaft für Völkerkunde, with its headquarters at Leipzig, has recently been founded under the auspices of Professor Fritz Krause and other leading German anthropologists. The aims of the Society are to prosecute and to promote the study of cultural anthropology, with special emphasis on the sociological aspects, and to correlate its methods and findings with those of other social sciences, such as comparative religion, jurisprudence, linguistics and psychology. It is proposed to attain this end by the publication of a special journal to be known as Vierteljahrschrift für Völkekunde and by a biennial congress, at which workers from different fields and regions may meet to discuss their special problems. Members of the Society are also entitled to a reduction of 25 per cent, on subscriptions to the Ethnologischer Anzeiger and Anthropes. The reception in Germany has been so favourable that it has been decided to widen the scope of membership to other countries. Fellows of the Institute desiring further information are

requested to apply to J. H. Driberg, c/o the Royal Anthropological Institute. J. H. DRIBERG.

Post-Cards from the Heye Museum.— 75
The Museum of the American Indian Heye Foundation, New York, has recently published a series of post-cards in colour representing phases of Indian Life and Art. There are two sets, archæological (Nos. 1-12), and ethno-logical (Nos. 13-24), price, 50 cents per set.

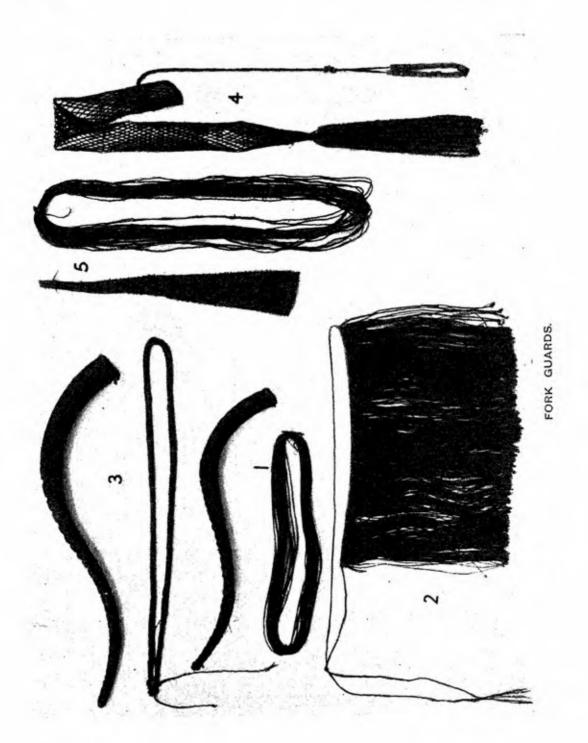
Amongst the most interesting of the subjects portrayed are: Nos. 10, Ancient Carved and Painted Mirror from Peru; 12, Jade Chisels from Alaska; 13, Human Bodies shrunken by the Jivaro Indians; 17, Ceremonial Mask of carved and painted wood, Auk division of the Tlingit of southern Alaska; 21, a typical tipi of the Indians of the northern plains.

The post-cards are well produced and the colours natural and lifelike. Each set is enclosed in an envelope embellished with an

appropriate design in colour.

in the said and





ORIGINAL ARTICLES.

With Plate F.

Africa: Ethnography.

Pinfold.

Some Notes on "Fork Guards." By G. F. Pinfold. With Plate F.

The peculiar custom of wearing "Fork Guards" is extremely interesting. It appears to be confined to a few sub-tribes of the great Sara people.

They are worn only by the married women in all cases; the unmarried women and girls wear a fringe apron (Fig. 2) in the Loie and Kan tribes, a fork band (Fig. 4) in the Yobodo race.

At present very little is known of their origin, and the only information obtainable from the women themselves is that they were worn by their mothers and grandmothers. There is no doubt that the object is to deceive strangers, for on approaching a village, especially an European, the men tuck the whole of the genital organs between their thighs and walk thus. The men wear no loin cloths, but a

sitting skin, usually made of goatskin with the feet cut off and the legs used as fastenings. These sitting skins are generally ornamented at the neck end with leather stitching or binding.

Distribution.—The distribution appears to be limited, as far as is known, to a few sub-tribes of the Sara M'Bai, viz., the Loie, Kan and Yobodo races, the "Fork Guard" of the latter race being the largest seen and collected by Major P. H. G. Powell-Cotton on his travels in French Equa-



Fro. 1

torial Africa during a 14 months' expedition from Lake Chad to the Ubangi River in 1925–26; and were only met with in the distict situated on the north bank of the Nana Barya, a tributary of the Bahr Sara, which runs into the River Chari from the west about 7° 30′ N., 17° 30′ E.

Details.—No. 1, Fork Guard, made of split cane, bound and covered with string made from a kind of flax, called by the natives lissar; top part round, remainder flat and tapering to a point at back; is worn in front protruding out and forward, and secured by a girdle made of similar string, the whole coloured a dull red.

Native name of Fork Guard, bouguei; woman's name, yomal, of Borro village,

Loie race. No. 196. M. No. 1215. 11th August, 1925.
No. 2, Fringe Apron, of native string, coloured brown, worn only by unmarried women and girls of the Loie and Kan tribes. Woman's name, d-al, of Kor village, Kan tribe. No. 211. M. No. 1224. 22nd August, 1925.

No. 3.—Similar to No. 1, but larger, Yobodo race. Woman's name, indocoll, from

Taysee village. No. 288. M. No. 1215. 12th September, 1925.

No. 4.—Fork Band, made of plaited string, worn by the unmarried women of the Yobodo tribe: the band is passed through girdle behind and in front, where it terminates in a red bead tassel. Woman's name, *koemar*, of Taysee village. No. 234. M. No. 1219. 12th September, 1925.

G. F. PINFOLD.

No. 5.—Fork Guard, made of split cane laced side by side, flat, tapering to a point, and fastened in front only by a girdle, the guard hanging down. Native name of guard, cumdove, and girdle, cliyee. Woman's name, m'betti, of Kor village, Kan tribe. No. 204. M. No. 1226. 18th August, 1925. Unmarried women of this tribe wear fringe aprons (Fig. 2).

The numbers in the text refer to Field No., Museum No., and date of specimens in the Ethnographical Collection, The Powell-Cotton Museum, Quex Park,

Birchington, Kent.

Ireland: Prehistory.

Keith.

Report on Human Remains from Cist Graves, Rathlin Island. By Sir Arthur Keith. F.R.S.

77

Mr. Blake Whelan has described the circumstances under which these remains were found, as recounted in the paper which follows. Six individuals are represented—in only one case was a skeleton approximately complete. As will be seen from my list, only fragments were found in the other five.

(I) A man, between 40-50 years of age. Frontal bone, half of upper jaw, lower

jaw. Part of right humerus. The right temporal bone.

(II) A man, about 60 years of age or older, front part of skull, which is thick and porous. The bridge of the nose is narrow and forwardly projecting. Part of a hip bone.

(III) A man, 30 years of age or less. Assigned to him are the following parts: right half of a frontal bone, part of an occipital bone, upper jaw and right half of

lower jaw.

- (IV) A woman, of whom only the lower and upper jaws have been found, with part of a humerus and a complete right radius. Also part of her hip-bone, which shows the female characters in a state which indicates an ample pelvis, which should have made childbirth easy.
- (V) A woman, about 50 years of age, represented by almost a complete skeleton. The vertebræ—especially of the loins—are marked by chronic rheumatic changes. The pelvis shows fully developed female characters. The skull lacks the forehead, but is otherwise fairly complete; the lower and upper jaws are preserved; so are the thigh bones and most of the limb bones, save those of the leg.

(VI) A child of three years represented by only one fragment—the lower end

of the right humerus.

When did these people live? Unless we can answer now, or hereafter, this question, their remains cannot help us in unravelling the history of British peoples

Mr. Blake Whelan has found evidence in support of Rathlin Island having been inhabited during the neolithic period but none which links the people of the cist graves with neolithic tools. When were such graves as he has described made? Miss Tildesley may be able to give some evidence on this point and, although I have never come across records of tombs of an exactly similar nature, yet they have points of similarity with the cists found in the Green Island, Jersey (not definitely dated), in the prehistoric graves at Harlyn Bay, Cornwall, and also, I think, with certain early Iron Age slab graves which have been found in Norway. In no sense are the Rathlin Island cists of a megalithic nature. One must remember that in the Isle of Man and in certain parts of Scotland graves of a somewhat similar nature have been found-those of the Isle of Man being certainly early mediæval and those of Scotland, late Celtic and early Christian. On the information now at our disposal I think it will prove that the Rathlin Island graves are late Celtic in date-Iron Age—perhaps about the same age as those at Harlyn Bay—a century or two before the arrival of the Romans in Britain. We may be certain that we have to deal with the contents of a cemetery made by a people permanently settled in the Island.

On two of the skeletons are certain marks which assist us in dating these remains. No. I (a man), has been badly wounded by a sharp metal blade, presumably iron, for the bone is cleanly incised, as can be done only by a keen edge. The point of his chin has been cut off by a blow aimed at his throat; his upper jaw is cut by another blow aimed where the upper lip joins the nose, while, high in the forehead, is the mark of another blow—all of them made on fresh bone either just before or just after death. I do not think a bronze sword could have made such clean incisions and so I infer that these people lived in the Iron Age.

Then man No. III shows certain remarkable cuts. One sharp stab, delivered on the right cheek, has sunk into the upper jaw, cutting cleanly through the roots of the upper wisdom tooth. The right half of his lower jaw has been preserved; on its inner or deep surface are seen many linear incisions of a shallow nature—such as might be made with a knife. But why such incisions should have been made I cannot guess; they were done when the bone was still fresh. Was the tongue hacked out?

I have never seen such marks before.

There is thus evidence that leads us to think that Nos. I and III were killed by the sword, and we may further infer that they were buried not by the enemy but by their own kin in the cemetery belonging to the family or community.

Other evidence also compels us to assign these people to a post-neolithic date. There is, first, the condition of the bones; that condition points to a date as early as late Celtic,—or as late as the time of the Norsemen. Further, it is very uncommon to find crowding of the lower incisor teeth among British people until late Celtic times—and in all four cases, where the lower jaws have been preserved, there is a greater or less degree of crowding of the lower incisor teeth. Thus if we take all the evidence into account we cannot well assign these people to an earlier date than the last century or two before our era—they may be later. The key to date will

be found in the type of grave.

What can be said concerning the racial nature of these people? Except in the case of No. V, a woman, we have only fragments to assist us, and they are not enough. In the case of No. V, the skull is of the type we find in the West Scottish Highlanders—and also in the peoples of Ireland and of Wales. I estimate that this woman's skull was 185 mm. long; it is 136 mm. wide; the vault is 117 mm. above the ear-passages. She was of short stature, the length of her thigh bones being about 410 mm., thus giving her a stature of about 5 feet 2 inches. Her forearm bones are slender, the right radius being 222 mm. long and the width at the middle point of the shaft being 13 mm., while the front to back diameter at this point is 11 mm. The thigh bone, below the small trochanter, has a width of 30.5 mm. and a front to back diameter of 24 mm., there being only a slight degree of flattening. At the middle of the femoral shaft the width is 24 mm. and front to back diameter 25 mm.

A survey of all the characters leads one to the conclusion that these people are representative of the long-headed people still living in the western parts of Britain. It is true that two of the men, Nos. I & II, have wide foreheads: the minimal width in each case is 100 mm.; the maximal width about 120 mm. and the width between the outer ends of the supra-orbital ridges 110–112 mm. These measurements are above the average, but they occur. In No. III the forehead was narrow, its minimal width being 94 mm.; in this individual the lower end of the interfrontal suture remained open.

There is such a close resemblance in dimensions and shape between the foreheads of Nos. I and II that one infers that they must be closely related—perhaps father and son. No. II was old with thickened, porous skull bones; No. I was younger

and, as we have seen, marked with sword cuts.

Two other points deserve mention. First the remarkable state of the teeth not a tooth is damaged by caries and none have been lost from disease; in the older individuals the enamel has been worn from the chewing surfaces of the molars, but there has been an abundant formation of secondary dentine which has prevented exposure of the pulp. No. IV (a woman) has no wisdom tooth on the left side; it has not been developed, a defect or retrogression which is common in our Celtic-speaking women. Also all the lower jaws show outgrowths of bone on the inner side of the alveolar part—just under the membrane which covers the gums—and this outgrowth or exostosis is most marked below and to the inner side of the second premolar tooth. It has long been recognised that people who depend on the sea-shore for food—shell-fish and seaweed—show these abnormal outgrowths of bone, apparently produced by the crunching of hard food against their gums. Thus we have evidence that these people were not likely to have been migrants to Rathlin Island but rather members of a community settled on the island.

ARTHUR KEITH.

Ireland: Archæology.

Tildeslev.

Archæological Evidence for the Date of Cist Graves, Rathlin Island. By Miss M. L. Tildesley.

The human remains dealt with in the foregoing report by Sir Arthur Keith were discovered by C. Blake Whelan, Esq., on Rathlin Island, off the coast of Antrim, in the summer of 1927.

Archæological Data.—The following are the archæological observations made by Mr. Whelan in the course of excavation :- Four long-cist burials were uncovered, skeletons extended, head to S.W. The cists were joined together, two side by side having a side-wall in common, and the foot-ends of both doing duty as head-ends of another pair of cists having again a side wall in common. The graves had been dug down through the 2-3 feet of surface mould to the top of the underlying "rotten rock" (hard red sandy clay), which thus formed the floor of the cists. The walls and cover-stones were formed of rough slabs of basalt and chalk, two or three to each side and to each cover. The cists were nearly filled with humus, and the fact that the foot-bones of one skeleton were still in articular position in a lump of earth allows us to infer that the humus was already there when the soft tissues decayed and did not arrive by subsequent infiltration through the interstices between the slabs. In the earth within the cists, at about the level of the human remains. were "numerous animal-bones and teeth and sea-shells," but no artifacts. In the overlying soil a well-formed end scraper was found of a white patina and presumably Neolithic, but this specimen was in no way directly associated with the burials. Finally, there had been deposited on top of and around the closed cists an abundance of shingle from the neighbouring beach. That no observed detail may be left unrecorded, it may be added that in the shingle Mr. Whelan noticed "some curiously stained red earth and also blackened layers," though it does not appear probable to the writer that any archæological significance attaches to these appearances. If the blackened layers had been due to burning, presumably some fragments of charcoal would have been revealed by the careful examination given; as this was not the case, one may surmise decayed seaweed brought up with the shingle from the beach, or some other such non-significant origin for the blackened layers, and some cause of this same natural order for the red earth also.

Date of Interments.—The above archæological data are not such as to indicate any period at which alone it would have been possible for such interments to be made, but careful examination of the evidence we have may at least serve to narrow down the probabilities. Though there was abundant witness to flint-working, Neolithic in type, near the cists as also elsewhere throughout the island, a Neolithic date is improbable (though not impossible) for extended skeletons in long

cists.* Again in the Bronze Age it is usual—in Ireland apparently as elsewhere for inhumation cists to be short and skeletons contracted, though exceptions exist.† In any case, the Neolithic and Bronze Ages may be considered ruled out by the condition of the bones, and by Sir Arthur Keith's observation of blows by a sharp metal instrument.

The subsequent period falls archæologically into four main categories: (1) the Early Iron Age, which in Ireland may be reckoned from the Celtic immigration (considered by Macalister to begin in the S.E. in the early part of the fourth century B.C. 1) to the conversion of Ireland to Christianity in the sixth century A.D.; (2) the Christian period from the sixth century onward, into which, however, there irrupted (3) the paganism of the Scandinavian raiders and settlers in the ninth and tenth centuries; (4) the mediæval period, which began with the final defeat of the Scandinavians in 1014 A.D. and witnessed their gradual assimilation, both political and religious.

(1) Data concerning the few finds of human remains assigned to the Early Iron Age in Ireland are very inadequate. All of the four cases recorded by Macalister (Archwol. of Ireland, 1928, pp. 202-5) lay beneath tumuli. In one case, Killale, the individual was buried upright, with bronze sword and iron-headed spear, within a rude incomplete cist 7 feet high; of that at Dunadry we know that the skeleton lay within a cist (short or long?), a ring of lignite on its head, and a stone urn and glass ring at its feet. We are told of the Lochrea tumulus only that no cist was present, that a cremation with urn was found at the bottom, and higher up the skeletons of a woman, a horse, and part of a red deer. As to the Cuffborough tumulus, it is merely stated that a male and a female skeleton were contained within a beehive-structure—on which feature alone the tumulus was tentatively referred to the Early Iron Age. Turning to the neighbouring countries for comparative data, we find a parallel to the Rathlin Island burials in an extended interment in a long cist at Blackness Castle, Linlithgow, assigned to the Early Iron Age on the evidence of a bronze armlet of a type otherwise unknown in Scotland: and a group of more definitely dateable cists at Catioroc, Guernsey, six in number and dated by their plentiful grave-goods (mostly weapons) at about 100 B.C., were all about 7 feet in length, and presumably therefore (though not certainly) contained extended burials. Again, the Early Iron Age interment at Birdlip, Glos., well-dated at second half of the first century A.D., consisted of three extended skeletons in a line, enclosed in a kind of cist: an oval ring of upright stones roughly roofed by some thin slabs. In the numerous Early La Tène interments in East Yorkshire (Danes Graves, Arras and other groups), though most were contracted, a few lay extended: none, however, was enclosed in a cist, and all were topped with small tumuli. Contracted burial occurs in other instances in this period; and, though orientation is not consistent, there seems on the whole to be a bias in favour of head north.

† For instance, the extended Bronze Age skeleton at Corston, Pembroke, described by Dr.

Cyril Fox in Archaeologia Cambrensis, 1927.

Archwology of Ireland, 1928, p. 17.

§ Account in Proc. Soc. Antiq. Scot., 1924-5, p. 116.

Account in Journ. Brit. Archwol. Assn., I, 1845-6, p. 305, and VIII, 1852, p. 64. I am

indebted for this instance, and the dating, to Mr. T. D. Kendrick.

^{*} Professor R. A. S. Macalister cites a case of 17 extended burials in graves "bordered " with stones set on edge " near Bally Bunnian, Co. Derry, which were presumed to be associated with a Neolithic settlement of which there was evidence on the adjacent beach. As, however no artifacts were found in the graves, the connection is only presumptive. (Ireland in Pre-Celtic Times, 1921, p. 313).

Mr. T. D. Kendrick, of the British Museum, has been good enough to give me his opinion on this subject as figured: that if found in Italy it would be assignable to the Bronze Age, but as far north as Scotland, the Early Iron Age is more probable, though not certain.

(2) When we come to the Early Christian period in Ireland, we find much ampler evidence of burials such as those of Rathlin Island. Thus the Rev. John O'Laverty, who visited the site of nearly every ancient church in the Diocese of Down, says: "I have observed that an aucient form of interment was practised " by the Early Christians in this portion of Ireland. The coffin consisted of " flagstones placed along the sides of the body, with a flagstone at its head and " another at its feet; similar thin stones resting on these were placed over the " body." He gives a list of 15 ancient Christian cemeteries in Down in which he had found stone-lined graves, and surmises that they would be found in all. He refers also to an account of 50-60 long cists (unmortared) near Dundalk, Co. Louth. The lie of these graves is S.E. to N.W., and in most of the others it is roughly E. to W., though in a very ancient church at St. John's Point, Co. Down, the graves radiate round a centre point, head outwards. Of grave-goods none, except that a white pebble was found in all those graves in which it was looked for; and often the remains of ferns on which the head was cushioned. These numerous instances of Early Christian long-cist burials in N.E. Ireland, with head pointed approximately west, make it unnecessary to give examples from elsewhere, though they could be quoted from Cornwall, and in considerable numbers from Scotland. And although in these latter cases and also in those from N.E. Ireland the cists are described as built of "thin slabs," or of "flag-stones," the "chalk and roughly-hewn stones" which take their place in the Rathlin Island burials would be explained by the absence of local stone more suitable for slab-making than basalt and chalk.

(3) Little is known of the graves of Scandinavian raiders and settlers in Ireland. The one Viking cemetery known as yet† had shallow burials without cists, richly

furnished with grave-goods; posture and orientation not recorded.

The evidence as to the type of grave used by Scandinavian settlers in Scotland has recently been discussed by Mr. Arthur J. H. Edwards in his account of a group of long-cist graves on the coast at Ackergill, Caithness, one of which yielded a bronze chain dated by Baltic parallels at about tenth century A.D. ... One only was a simple flagstone cist grave embedded in the sand; the other cists were placed within beds of stones (flat beach-stones forming the lower layers, white quartzite pebbles the top) each bed being enclosed within a kerb of stone slabs. Other Viking cist-burials of less elaborate character—as also burials without cists—are, however, known in Scotland. Thus Mr. Edwards mentions Orkney burials (Bay of Pierowall) laid on the ground within "roughly made enclosures of stones," and covered each with a mound; a cist under a burial-mound at Eigg; two graves "with a line of stones " on edge that formed an enclosure round each" at Ballinaby, Islay; a cist-grave at Kiloran Bay, Colonsay. If to these instances of Scandinavian long-cist burials in Scotland one could add evidence of a similar custom in the lands whence the Vikings came, such might be more safely assumed for the other countries in which they settled. In Norway, however, burials in stone cists are rare in the Viking period; though we learn that in the Island of Bornholm cist-graves with a stone setting above them (recalling some of the Ackergill structures) are found in Viking times. Again, at Kalfborgara in Iceland, a group of the graves of Norse immigrants of this period were "surrounded by walls of loose stones and covered with gravel " and stones."

These various threads of circumstantial evidence prevent our seeing anything improbable in a Scandinavian origin for long cists, shingle-covered, on Rathlin Island.

^{*} Journ. Roy. Hist. & Archaeol. Assn. of Ireland, XV, 1879-82, p. 105.

[†] At Islandbridge, near Dublin: Archαol. of Ireland, by R. A. S. Macalister, 1928, p. 338.

[†] Proc. Soc. Antiq. Scot., LX, 1927, pp. 160-182.

As regards the position of the body in Viking burials elsewhere, where records exist, lying extended on the back seems more usual than otherwise, and as to orientation there is no invariable rule.

(4) The practice of lining Christian graves with stone did not cease in the British Isles with the Early Christian period. In fact, burial in stone-lined cists is said (Journ. Roy. Hist. & Archwol. Assn., Ireland, XV, p. 106) to have persisted at Ness, Isle of Lewis, until late in the nineteenth century. This was unusually late, but instances of a stone lining to graves in which mediæval bodies were laid—usually enclosed only in a shroud—are likely to be found at any part of the Mediæval Period in England. Thus, two occurred in 85 mediæval burials excavated on Castle Hill, Scarborough, in 1922–5; a number have been found under the pavement of Chertsey Abbey; one under the aisle of Beaulieu Abbey. But in most, if not all, of such cases the stone is trimmed into small blocks which fit more or less closely together, and these are often so placed as roughly to follow the outline of the extended body.

Conclusions.—The direct evidence that we have of the practice of extended burial, head roughly west, in long cists, without grave goods, in the Early Christian period in N.E. Ireland, suggests this as the most likely date for the interments on Rathlin Island, if the animal bones found with them can be disposed of as due to chance; for the provision of food for the dead is hardly a Christian practice. There are no known remains of a Christian church near the site (though one cannot make any assertion as to what excavation might reveal), and tradition states that the Protestant church, half a mile distant, occupies the site of the ancient Christian church founded by St. Comgall of Bangor about 580 A.D. The absence of a Christian church does not, however, necessarily disprove a Christian origin for the tombs. The Christian custom of church and churchyard burial began with the interment of saints within the church itself. Gradually, ecclesiastics and then lay notables pressed in to share the distinction originally reserved for sanctity; and when commoners' burials also began to follow the churchward trend, exigencies of space necessitated burial outside the church. In more than one region, however, this Christian tendency was opposed by a more hygienic pagan custom, of burial away from the centres of habitation. Such was the Anglo-Saxon practice, and the stages by which the Christian tendency prevailed against it are indicated by the interment of St. Augustine within the church at Canterbury in 605 A.D.; and the first ordinance establishing church graveyards about 742 A.D., under Cuthbert, Archbishop of Canterbury. In the Roman Empire, the long battle against the Christian tendency was only formally ended by the Emperor Leo's abrogation, in the ninth century, of the interdict against burial within city walls. In France churchyards took the place of cemeteries in the course of the ninth to the tenth centuries. We may thus expect in Ireland also a transition period in the first Christian centuries when interments were still made away from churches; and to this period the Rathlin cists might belong. As regards the covering of the cists with shingle carried up from the beach, whether this was a pious Christian custom in the district I do not know: it is not more incongruous than the observed custom of placing a white pebble in the grave.

The provision of food for the dead—if we must interpret the animal bones thus—is, however, more consistent with attribution to the pagan Viking invaders than to Christians, early or late. And while evidence is too scanty to show whether the Scandinavians ever buried in long cists in Ireland, instances are not lacking of their using this method of burial elsewhere. Also the surrounding or covering of the cist with "stones from the beach" in several of these instances may indicate a Scandinavian tradition of which the shingle on the Rathlin cists is only another expression. The orientation of the heads to the S.W. would be neither for nor

against a Scandinavian origin. A Mediæval date is less likely than an Early Christian on account of the weakening of the cist-tradition in later Christian times. No date, however, from the Early Iron Age onwards, can be positively ruled out on the archæological data, though the Early Christian and Scandinavian periods provide

most of the fairly close parallels in the above comparative evidence.

In discussing the Rathlin Island burials one point has not been dealt with: the arrangement of the cists with "party-walls" in common. I know of no instance elsewhere exactly repeating what seemed to be the arrangement of these four graves, but it may be supposed that economy of material might occur to cist-builders of any period. For example, "party-walls" between pairs of cists have been found in the Harlyn Bay site (probably La Tène): two in one cist with a thin partition between were found in the Scandinavian cemetery at Ackergill. Until we have evidence of a four-square arrangement of cists as a tradition of a given period, we may look upon it as an individual variation without significance from the point of view of determining date.

That the dating of the Rathlin Island cists cannot yet attain to definiteness is largely due to a fact which Professor Macalister frequently laments: the fact that the large majority of archæological sites and finds in Ireland have been so casually examined and so unintelligently recorded; whence our lack of precise knowledge concerning its burial-customs in successive ages. At least the Rathlin Island site itself has not suffered from this drawback with Mr. Whelan as investigator, and we may hopefully expect that the same thoroughness and accuracy of observation applied by him in any subsequent digging on this site may not only lead to the definite dating of the Rathlin Island cists, but help to fill a gap in present-day knowledge of Irish archæology.

M. L. TILDESLEY.

Sociology. Hocart.

Coronation and Marriage. By A. M. Hocurt.

The identity of installation and marriage was not as definite in Fiji as I could have wished at the time of writing my "Kingship." The following extract from the installation of the Lord of Ndravuwalu, in the island of Kandavu, is decisive.

"Two heralds tie a cloth round the new chief's waist. At the end of the usual period of quiescence, which lasts four days, 'the cloth bathes.'* A lady is brought to be the chief's (wife). The chief bathes with the cloth which those two tied round his body. He calls the lady that is about to become his wife and she brings a change of clothes. He comes out and his wife wrings out the cloth. From now on she is called queen (Ranandi)"

In Lekutu in Vanua Levu it was stated that she who wrung out the cloth after the installation became the chief's wife.

In a Mbauan marriage, after "cohabitation," the bride discards her short skirt and receives a long one from her mother. When the Lord of Levuka is installed, as described in my "Kingship," p. 72, the women of Levuka prepare a skirt for the installation of the Lady of Levuka (Randi Levuka).

The original identity of installation and marriage explains a curious Indian notion which is otherwise inexplicable. It is considered a sin for a younger brother to marry before the elder. But it is also a sin for the younger to ascend the throne before the elder. There is only one term for both classes of offenders, parivettri. See Manu, III, 171; Vishnu Purana, IV, 20, 7ff.; Muir's "Sanskrit Texts," I, 278. The younger brother by marrying first would evidently as house-lord (grhapati) rank above his senior, which is contrary to the natural order of things.

With us married women still rank above spinsters.

^{* &}quot;Cloth" means both the cloth and the chief.

By insisting too much on the king my "Kingship" has perhaps obscured the fundamental idea which is that a man cannot sacrifice without a wife. This principle is clearly expressed in India. Fustel de Coulanges, in his "Cité Antique," chapter IX, long ago drew attention to this principle in Greece and Rome*; but its importance does not seem to have been appreciated in an anti-ritualistic age.

As to why the wife should be necessary, I think it will turn out in the end that, as Professor Elliot Smith has suggested, the act of procreation first gave rise to the idea of creation, and all sacrifice is an act of creation.

A. M. HOCART.

Brittany: Archæology.

Forde.

The Megalithic Gallery in Brittany. By C. Daryll Forde.

The allée couverte, or covered gallery, occupies an important position in the megalithic architecture of Brittany. Although this type of tomb forms an integral part of the early culture of the peninsula and cannot, on our present data, be regarded as earlier or later than the more abundant passage dolmens and grouped chambers(1), it nevertheless indicates both in geographical distribution and in occasional items of furniture distinct external relationships. That these tombs are in some instances virtually contemporaneous with other forms is readily demonstrated. The allée converte du Net, St. Gildas de Rhuys(2), 22 m. long, although somewhat ruined and penetrated in Gallo-Roman times, as is evidenced by a whole family of Roman Venuses and pottery, has, however, yielded a considerable number of objects typical of the Breton megalithic culture, including polished diorite axes, Grand Pressigny and other flint blades and points; a tanged and barbed arrowhead, a rock crystal pendant, bell-beakers, and other sherds, together with incinerated bone fragments. The famous but ruined gallery of Kerlescant, Carnac, described by Lukis(3), was also of this form. The chamber, 52 feet long and 5 feet wide, was divided into two sections. It lay longitudinally in an clongated mound about 150 feet long, 50 feet wide and 7 feet high. The condition of the tumulus suggested that one chamber had been built later than the other. This tomb, although previously violated. yielded furniture essentially similar to that of the passage dolmens and affording no basis for chronological distinction. The objects included a typical bell beaker, a carinated bowl, one laurel leaf ("amygdaloid") and two barbed arrow-heads. a rock crystal pendant, a miniature axe pendant, and a polished stone axe.(4) The most interesting features of the tomb are the two "holed stone entries," one in a lateral wall in the shorter of the two compartments and the other in the megalithic wall separating the two. Both these entries had been formed by carving away a semi-circular hole on the sides of two adjacent slabs. Lukis reported a similar entry in one side wall in another gallery about 24 m. long at Kertearac, quite close to Kerlescant; this monument has since been entirely destroyed. Holed entries are not, however, exclusive to the allée converte in Brittany. The passage dolmens of Garen-Dol, Kerlouan, Morbihan and the laterally (?) chambered Parc-ar-dolmen. St. Pol de Léon, N. Finistère, also had holed entries constructed in a similar manner.(5)

Kendrick(6) has pointed out the analogies between the Kerlescant tomb and the "long cist" at Le Couperon, Jersey. Both are rectangular, with holed stones and flanking lines of megalithic blocks within the body of the tumulus. He considers that both show the influence of the Seine-Oise-Marne region to the east of Paris where rock cut and rectangular megalithic chambers occur as the tombs of the early culture in this area, analogies in furniture, including callais and greenstone (jadeite, etc.) axes, afford undoubted evidence of contact between Brittany and the Paris area in "Megalithic" times. A potsherd at Kerlescant was decorated with rough nail markings, which are not characteristic of the Breton pottery but occur in the Marne. (7)

But the character and distribution of the tombs of north Brittany indicate still more strongly the closeness of this correction. In Ille-et-Vilaine, the northern Côtes-du-Nord, and in parts of north-eastern Finistère, the rectangular allée-couverte is the standard tomb form.(8) In Ille-et-Vilaine every one of the tombs that is at all well preserved is of this type. The magnificent tomb of Essée, three kilometres from Retiers, is rectangular and divided into two sections.(9) The short "vestibule" is 3.75 m. long by 3 m. wide, the slightly larger "chamber" is 14 m. long and 4.2 m. wide, and is separated off by projecting megalithic supports which leave a narrow gangway. The length of the chamber is also broken up by three transverse megalithic pillars projecting from one wall, a feature also found in the "cists" of the Paris area. There is, unfortunately, no record of the contents of the Essée tomb. The allé couverte of Tresée (Maison des Fées) further north is also a long rectangular structure, 14 m. long and 2.6 m. wide, and only 75 cms. high inside. It is divided into a short and long chamber by a transverse slab. It has a further resemblance to the Seine tombs since "it is partly buried in the ground, but shows no trace of a covering tumulus."(10)

Two rectangular chambers of similar proportions, but considerably smaller. occur near Landéan in the forest of Fougères. The interior plans are 4 m. long by 1 m. and 3-4 m. long by 1 · 6 m. respectively. They do not appear to be subter-

ranean, like the megalithic cists of the Seine.(11)

In the Côtes-du-Nord megalithic chambers, apparently covered galleries occur in the arrondissement of Dinan at Pleudihen, St. Helen (Rocher, 11.5 m. long); Notre Dame de Guildo (Gesrouen, 13 m. long) and Trégon (la Heuchère, 15.4 m. long).(12) A gallery 13 m. long, at Ville-au-Borg, also in Dinan, was excavated by Martin in 1897. A point butted diorite celt 17.6 cms. long, a Grand Pressigny "dagger" and a transverse "arrow head" were found.(13) The gallery of Tertre de l'Eglise, Plevenon, was originally covered by a large tumulus. It was ravaged by the owner in 1859, who recovered from the chamber (17 m. long, 2 m. wide, and 1.4 to 1.6 m. high inside) an inhumation burial, a rich furniture of polished stone axes about 40 in number, beads and a metal "dagger." This dagger, although said to be bronze, was more probably of copper, since it was apparently of the unriveted West European type found elsewhere in the megalithic tombs of Brittany. The furniture has, however, been entirely lost, and the tomb is now a complete ruin. (14) Agallery, 12.6 m., occurs in the prehistoric settlement at La Poterie; already rifled, a point butted diorite celt 12.5 cms. and a 13 cm. thin butted flint axe were, however, recovered in modern times.(15) The ruined gallery on Ile Grande, off the coast at Boden, is said to have been originally surrounded by a stone circle.(16)

Further east, at Roche-Camio, Pledran, near St. Brieuc, is a gallery of the Essée type, i.e., with a small "vestibule" section and long major chamber.(17) In the same district there are the ruins of the magnificent "Dolmen de la Couette," Ploufragen, a rectangular chamber 15 metres long, which was opened in Roman times.(18) The gallery of St. Aaron, Lamballe, 11 m. long by 1.5 m. wide, was explored in the middle of the last century and yielded a typical megalithic furniture of polished axes, flint blades, and a large bead.(19) Several galleries of smaller dimensions are also known in the Côtes-du-Nord, e.g., Kerbors, Lezardrieux, 8 m. long by 1.4 m. wide and 1 to 1.3 m. high inside. This tomb lay close to the stone circle

of Kerbors, but no record of its furniture is available.(20)

This tomb form extends into northern Finistère, a small but spacious example occurring at St. Pol de Léon (8.5 m. long by 3.9 m. wide.(21) The gallery of Mougon Bihan, near Commana, Sizun, was 13 m. long by 1.6 m. wide. On one pillar are relief carvings of metal implements.(22) Although the enclosed gallery is relatively

rare in southern Finistère the forms undoubtedly suggest relations to the preceding types. A well-preserved example was explored by du Chatellier near Beuzec, Cap Sizun. This gallery, the allée converte of Kerbannalec, lay only 500 metres from the bay of Douarnenez. It was strictly rectangular, 11 metres long, 2 metres wide, and closed at each end. A row of megalithic slabs lay parallel to the chamber along one side, as at Kerlescant. The contents relate it definitely to the southern culture, for a carinated bowl with groups of vertical incisions were found with flint points and a spindle whorl. Other galleries are reported from Coadigou (Loctudy), Kerleguer and Kersidal (Plomeur). Unfortunately they are mostly ruined and reports of excavation are rare, but the exploration of the gallery at Crugou yielded a furniture which included beakers and polished stone implements. At Penquer, in Plozevet, du Chatellier excavated a tumulus containing a diminutive gallery, only 4 metres long, with very rich furniture, including a beaker, "bracer" and a tanged copper dagger of early type.(23)

Although we have emphasised the frequency of the straight gallery in north Brittany it must not be thought that passage dolmens are entirely absent. In view of the ruined condition of the majority of the tombs and the lack of detailed records it is impossible to attain great precision and, although no well-preserved passage-dolmen can be described from Ille-et-Vilaine, the form undoubtedly occurs in the Côtes-du-Nord. The "dolmen" of St. Servais, Callac, had a chamber 5 m. long, 3 m. wide by 2 m. high, led up to by a narrow gallery. (24) Near Tregastal are the ruins of what appears to have been a passage dolmen with a large chamber. (25) At St. Connan, St. Nicholas du Pelem, occurs a passage dolmen of the Gavr'inis type in which the chamber merges into the gallery. The chamber plan is 2.5 m.

by 2 m.; the gallery is now ruined.(26)

The covered gallery is peculiar in its distribution. From the Vendée to Northern Finistère megalithic tombs and their associated settlements indicate an almost unbroken occupation of the shores of the peninsula, while, apart from the Middle Vilaine basin(27), the distribution thins out rapidly towards the interior. There is little doubt that the vast majority of the monuments lie within ten to fifteen kilometers of the coast.(28) In the north and north-east, however, in the Côtes-du-Nord and Ille-et-Vilaine, although minor concentrations occur sporadically along the coast, e.g., north of Lannion, the distribution is generally interior. The tombs of this north-eastern quadrant are less numerous than along the southern and western They are scattered widely and nowhere form concentrations approaching those of the Gulf of Morbihan, Southern Finistère, or even the Crozan peninsula. These exceptional conditions of interior and scattered distribution contrast in the strongest possible manner with the crowded seaboard distributions of the South and West. Correlated as they are with a tomb form which is rare and sporadic elsewhere they suggest a process of expansion and settlement temporarily divorced from the generally maritime movement of the megalithic culture, and serve to link the North Breton tombs more definitely with the inland culture of the Paris basin. We are, therefore, inclined to dissociate them from the South Breton centres, as representing a westward expansion from the east in which maritime enterprise played little part Such dissociation cannot, of course, have been complete; carinated bowls, button axes and other elements link the two areas, while the passage dolmen and covered gallery are by no means mutually exclusive. It nevertheless appears probable that the boggy shists of Central Brittany and the incompleteness of the maritime circuit round the northern shores perpetuated in some measure a distinction originally based on divergent cultural roots.

The wider relations of the covered gallery as found in Brittany and the Paris culture raise difficult problems. The "long cist" with "holed stone" entries or partitions is widely distributed as a Bronze Age tomb form in Central Europe

and Sweden. The furniture is very different from, and almost certainly later in actual date than, that of either the Paris region or Brittany, so that derivation of the last two from Central European and ultimately Caucasic forms is practically

impossible.

Kendrick refuses to consider southern prototypes, because he is convinced that the south Iberian tombs are late.(29) He maintains that "in Spain the evidence " is decisive, for it is only when nearing the end of an evolutionary series of tombs "that we find this feature introduced, and it is absolutely certain that it was a " device unknown to the earliest megalith makers in that country or in Portugal, "that is to say, the dolmen people."(30) But the Iberian "evolutionary series" is by no means certain(31) and it still remains possible that the holed-stoned tombs cited by Kendrick, i.e., Gor and Cueva di Viera, Antequera(32), are, in fact, among the first fruits of Iberian megalithic architecture. No mention is made, moreover, of the fact that the holed stone entry is a characteristic Almerian Trait. The necropolis of Gor, Granada, is a western output of this culture, (4b) but the same feature appears in the heart of the region at Los Millares.(5) At Los Millares some of the chambers are partly excavated and the megalithic, as distinct from the dray-walled, tomb consists of bulging oblong chambers separated by a partition from a gallery little narrower than the chamber.(34) "Rectangular" partitioned tombs also occur in Algarve, e.g., Nora, and Alcala III.(35) A full discussion of this problem cannot be attempted here, but significance of the holed stone entry in Brittany and the Marne clearly depends on the megalithic sequence in Iberia. (36) As far as Brittany alone is concerned the proximate source would appear to be, as Kendrick suggests, the Paris region in northern France. Bosch Gimpera, although tempted to reverse the process, yet decides that "it is, however, more probable "that it is in the South, where these types represent the end of an antochthonous "development in the Pyrenean culture (sic), that we must seek the point of "departure for this type, and explain the Breton forms from those of North "France and not inversely."(37) C. DARYLL FORDE.

REFERENCES.

- (1) Cf. Forde, C. D., "The Megalithic Monuments of Southern Finistère," Ant. Journ. 7. 1927. P. 1.
- (2) Le Rouzic, Z. "Carnac: Fouilles faites dans le Région; Campagne de 1921." Nancy: 1922. P. 8.

(3) Journ. Brit. Arch. Ass. XXIV. 1868. P. 46 ff; see also Salmon, P.: "Dolmen avec Tumulus et Cromlech à Kerlescan, Commune de Carnac." Paris. 1887.

- (4) The monument had been opened and explored in 1851 when the megalithic roofing slabs were nearly all removed; the objects then recovered are not recorded. The investigations of Lukis disclosed the furniture here described. A Bronze Age single-handed pot was also recovered at this time.
 - (4b) Cf. Bosch Gimpera, P., L'Anthropologie, 35, 1925. P. 432.

(5) Salmon, P. Op. cit. P. 6.

(6) "The Axe Age." London: 1925. P. 23 ff.

(7) Vannes Museum, No. 245. Cf. Kendrick, op. cit., fig. 6.

(8) The "angled galleries" which occur frequently in South Brittany, c.g., Pierres Plates, le Rocher and Luffung in South Morbihan; Poulguen and Run Aour in South Finistère are not considered here. The massive construction and the carvings of South Breton type associate them more directly with the passage dolmens of the area.

(*) Bezier, P.: "Inventaire des Monuments Mégalithiques d'Ille - et - Vilaine." Rennes.

P. 133 ff, and Pls. XVIII, XIX and XX.

(10) Bezier, P.: "Inventaire des Monuments mégalithiques d'Ille-et-Vilaine." Rennes. 1883. P. 48, and Pl. XIII, and cf. Danjou, Soc. Arch. Ille-et-Vilaine, 1880 (extract). A gallery at La Turballe, Guérande, Loire Inférieure, is also partly excavated in a natural mound. Cf. Bull, Soc. Arch. Nantes, XXII. 1883. Pp. 115-6.

(11) Danjou, Mém. Soc. Arche. Ille-et-Vilaine. 1862. P. 43.

(12) Fornier, Mém. Soc. d'Emulation, Côtes-du-Nord. 1872. P. 118 ff.

(13) Musée de Kernuz, and cf. Harmois, A.-L.: "Inventaire des Découvertes archéologiques du Département des Côtes-du-Nord." Mém. Soc. d'Emulation, Côtes-du-Nord, XLVII. 1909. Pp. 5, 6.

(14) Sec Harmois: "Inventaire." 1909. Pp. 47, 48.

(15) Harmois, A.-L.: "La Poterie," Lamballe, Mém. Soc. d'Em. XLIV. 1911. P. 1, and cf. Mat. 1884. P. 478.

(16) Harmois: "Inventaire." 1912. P. 219.

(17) de la Chenelière, G.: "Inventaire des Monuments mégalithiques compris dans le Département des Côtes-du-Nord." Mém. Soc. d'Emulation, XVII. 1880. Pp. 129-130.

(18) de la Chenelière : "Inventaire." P. 130.

(18) Mém. Soc. Arch. Côtes-du-Nord. 1845. P. 16 ff. (20) de la Chenelière : "Inventaire." Pp. 107, 108.

(21) du Chatellier : "Epoques," p. 101.

(22) du Chatellier: "Mat." 1884. Pp. 553-5, figs. 257-8.

(23) du Chatellier : "Mat." 1880. P. 49. (24) de la Chenelière : "Inventaire." P. 100.

(25) Ibid., p. 113.

(26) Ibid., p. 106.

(27) See Man, 1926-27, for the distribution in the western part of this area.

(28) I hope shortly to publish a detailed analysis of the megalithic distributions in the Breton Peninsula.

(20) Op. cit., p. 45 f.

- (30) Op. cit., p. 48. Pp. 113 f.
- (21) Cf. Aberg, N.: "La Civilisation Enéolithique dans le Peninsule ibérique." (32) Op. cit., p. 45.
- (32) Cf. Siret, L.: "L'Espagne préhistorique," Rev. Quest. Scientifiques, XXXIV. 1893. Pp. 522, 523, and fig. 174.

- Cf. "Los Millares," No. 8, in Siret. Op. cit., fig. 170.
 See "Estacio da Veiga." Op. cit. I. Est. XII. P. 248 and III, Est. III. P. 137.
- (36) The "goddess" carvings of Petit Morin may ultimately be related to the Iberian.

(37) Rev. Anth. 1927. XXXVII. P. 211.

REVIEWS.

Montandon. Japan : Ethnology, Au Pays des A'mou : Exploration Anthropologique. By Dr. George 1928. Montandon. Masson & Cie., Paris. Pp. 240, 48 photographic plates, 115 figures Price not Paper covers. in the text. stated.

Twenty-five years ago Professor Basil Hall Chamberlain, an authority on Ainu matters, warned "would-be investigators " of Aino peculiarities" that they "should " exercise scrupulous care in their choice " of individuals for study, as almost every " Aino village now includes a considerable " percentage of half-breeds." Dr. Montandon's portraits, Nos. 38, 15, 70 and Fig. 137, are typical of Ainu physiognomy as he saw it—the very types that an old Japan hand would recognise as betraying Japanese blood. Nos. 55, 27, 37, 30, 29, 24 (males), and 93, 105, 92, 78, 74, 88, 95 (females), and also, for control, Dr. Neil Gordon Munro's male Ainu in Figs. 412, 413, and 414 (nude) of Prehistoric Japan (1911), which illustrate the characteristic Ainu physiognomy of a quarter of a century ago.

After 184 pages devoted to Palwo-Siberian craniology come head and face measurements accompanied by notes as to age, name, native village, hair, skin

and eye colour, existence of Mongolian fold, stature and arm-spread, of over 100 male Ainu, and portraits of 36 adult males and 33 adult females.

The effort to reduce to a cut-and-dried racial classification the welter of overlapping types inhabiting Northern Asia is not very successful, but useful facts emerge, e.g., (p. 72) that the Chukchi peninsula, having formerly been entirely populated by anatomical Eskimo (vide recent archæological fieldwork and craniological research), any ancient skulls from this district in museums should be classed not as primitive Chukchis but as Eskimo; and (p. 164), that Alouts and Ghiliaks belong to the same anatomical group, of which the Ghiliaks with their "hyper-" mongolic characters" are the "least " contaminated by admixture and cross-" breeding and the most representative." Problems arising from the distribution, in one and the same human type, of the physical features of European and Mongoloid in proportions and degree of characterisation that vary infinitely, would seem better explained by the hypothesis of Sir Arthur Keith's recent Huxley Memorial Lecture on "The Evolution of the Human Races," J.R.A.I., Vol. LVIII, 1928, than by Dr. Montandon postulating (see pp. 154, 175, 194, 204 and 208) the interbreeding of races whose physical features would have to have been already evolved to a high degree of specificity before such cross-

breeding took place.

There is no mention of the fact (published in English by B. H. Chamberlain 25 years ago, and by Dr. Munro in 1911, loc. cit.), that the Ainu share with prehistoric European races the primitive characters of platyenemia, torsion and perforation of the humerus, curvature of ulna, channelled fibula, torsion of the femur, pilastered femur, and tendency to a third trochanter, although he contends that, whilst the Mongolian element is present in varying degrees in all four Palæo-Siberian peoples (p. 177), the dolichocephalic element among them derives from an original Ainu strain when this race "still occupied Siberia," and which he sees in the Kamchadals, Koriaks, Yukaghirs and Chukchis. Dr. Montandon betrays his omission to acquaint himself with the prehistory and history of the folk whose anatomy he investigates (a) when he supports the argument that the Ainu were originally a continental people by trying to prove that the Japanese were a maritime race on the testimony of what he believes to be their tradition of housebuilding on piles (Appendix); and (b) when he misunderstands a point made by Koganei, in regard to the enlargement of the foramen magnum of certain Hokkaido skulls (p. 111), owing to his own assumption that the Eta of Japan are merely a social caste, whereas the Japanese tradition that the Eta are of different racial descent is supported by the physiognomy of the inhabitants of Eta settlements and by certain Eta customs. Dr. Munro has pointed out (loc. cit., p. 75 ff.) the analogy between the winter roofed pits or toichisei of the Kurile Ainu and the winter workshops of some of the Eta folk. Dr. Montandon has not envisaged the important anthropological problem of the contribution, anatomical and cultural, made by the Ainu (once spread over the entire Japanese archipelago) to the now consolidated Japanese race, though some of his investigations throw light on it. example, whereas all Buriats examined by him show the Mongolian fold to some degree, 56 per cent. of the males and 50 per cent. of the females having it complete, 25 per cent. only of the Ainu males and 29 per cent. of the females show a trace of it, whilst, in the Japanese he examined, all stages were represented from absence to a completely characteristic Again, the Ainu women examined are in all cases more Mongolic in their physical characters than the men: their

hair is less wavy and less inclined to show auburn tints, their eyes are blacker, their cheekbones more prominent, the root of the nose more spread, the face flatter and more prognathous. We commend this list of sexually selective characters to the attention of Sir Arthur Keith: can he explain it by the proportionately more intensive action of one or other growthcontrolling factor of the endocrine glands in one or other sex? Can these be sexlinked Mendelian characters? Such a physiological explanation would throw light on the biological evolution of the Japanese race in which every degree of Japanese race in represented. En passant, the author asserts (p. 194) that the hair colour of the Japanese of both sexes is "sans exception, ni restriction" uniformly black. There is, however, a tendency observable among some women to waviness and a trace of auburn. In four years' residence among the Japanese, the reviewer never saw wavy or chestnut-tinted hair in the progeny of unions between Japanese The European blood and Europeans. betrays itself, rather, in fairer skin, occasionally in lighter eye-colour, and generally in greater height and slenderness of build with less mongoloid facial features. general, the European characters were more accentuated in children whose European parent was Nordic in type, though the degree varied in members of the same family, and was least in evidence in children whose fathers were Portuguese.) as the testimony of Dr. Montandon's photographs goes, this dominance of the mongolic characters would seem to be even more marked in Ainu whose blood has been contaminated by the conquering

Dr. Montandon's book is both timely and valuable, but it serves to point the need for a Japanese anthropologist familiar with local history and prehistory to tackle the problem of Ainu origins before it is too late, and publish his findings and documents in some European language. The usefulness of the book is diminished by the absence of an index, but it contains bibliographies. The photographic reproductions are satisfactory, and the paper and printing good.

V. C. C. COLLUM.

History. Cook: Adcock: Charlesworth.

The Cambridge Ancient History.

Edited by S. A. Cook, F. E. Adcock,
M. P. Charlesworth. (VII. The Hellenistic
Monarchies and the Rise of Rome.) 9½ in.

× 6½ in.; pp. xxxi + 988, 18 maps, plans
and tables. Cambridge: At the University
Press, 1928. Price 37s. 6d. net.

The previous volumes of The Cambridge Ancient History were reviewed in Man, 1924 (91), 1926 (136), and 1928 (77). The successive volumes, representing their succeeding centuries, bring with them the fall of empires and civilisations; but their fall seems to be a signal for the uprising of other empires and other civilisations; no sooner do they totter to their fall than new streams of culture, new modes of life, new religions, await the attention of the anthropologist to show that they are not so new after all.

Thus, in the present volume, the beginning of the decline of Greece is narrated side by side with the story of the foundation and rise of Rome; and Principal Stuart Jones's account of the primitive institutions of Rome opens a discussion of the origin of its kingship, a subject that at once brings us into contact with the Celts, whose coming forms the theme of another chapter, by Mr. de Navarro, of primarily anthropological interest. Among the other sections of this volume to which the attention of anthropologists may be profitably drawn, I may mention Dr. Schulten's notes on the institutions and civilisation of the Iberians.

THEODORE BESTERMAN.

India: Ethnography. Ayyar.

Anthropology of the Syrian 83

Christians. By Rao Bahadur L. K.

Anantakrishna Ayyar, B.A., L.T. Pp. xvii

+ 338, with 48 plates. Cochin Government

Press. 1926.

Christianity was established on the West Coast of India at least a thousand years before the arrival of the Portuguese; in fact, there is nothing improbable in the legend that traces its foundation to the Apostle St. Thomas. In 1921 the Syrian Christians numbered nearly 800,000, concentrated mostly in Cochin State and North Travancore. Their greatest strength lies inland round Kottayam, where they number over 40 per cent. of the population (in one taluq, Minachil, more than half), and this too in one of the most intensely Brahmanised areas in India.

From the Sixth Century A.D. till the coming of the Portuguese these Syrian Christians looked to the Nestorian Patriarchs "of Babylon" for their bishops, but in 1552 a large section of the Nestorian Church joined Rome. Friction followed in India between the Portuguese and Syrian ecclesiastics which culminated at the Synod of Diamper (1599) in a compomise; the Syrians retained their Syriac liturgy and abandoned practices unacceptable to Rome. But patronage was vested in the crown of Portugal; the Syrians

intrigued against the Jesuit prelates appointed and, with sublime indifference to doctrinal consistency, applied to the Nestorian Patriarch of Babylon, the Jacobite Patriarch of Antioch and the Coptic Patriarch of Egypt for an Oriental bishop. Antioch responded, and the Syrians became Jacobite (1652-65). Carmelites, however, undertook the work of reconciliation, with such good will that by 1921 the Romo-Syrians numbered nearly 424,000, under four bishops of their own nationality.

Meanwhile, in 1816, the Church Missionary Society set out to win the Jacobites for Protestantism, and started a feud which only ended in 1889 with the segregation of the reformers by court decree. In 1921 the Jacobites numbered nearly 253,000, the Reformed Syrians some 112,000.

Minor secessions there were—from the Jacobites in 1751, when a section set up an independent see at Tozhiyur, on the Malabar border; from Rome in 1874, when a faction, the Chaldwans, reverted to Nestorianism.

These Indian enclares of Oriental Christianity offer an inviting field for cultural research, a task for which the author of "Cochin Castes and Tribes" is uniquely qualified. Racially, these Syrians are evidently of similar stock to the Hindus, among whom they dwell. Culturally, they are less Indianised than one would expect. a fact due, perhaps, to the Westernising influences brought to bear on them since the days of the Portuguese. Two indigenous tendencies, caste and mother-right. are strongly in evidence. Not only is marriage prohibited between the six sections above enumerated, but there are divisions too within those sects themselves; untouchable castes pollute Christians as they pollute Hindus; and even the Catholies of the Latin Rite, to whom Mr. Anantakrishna Ayyar also devotes two chapters, are split into three endogamous groups. Matrilineal succession, which is definitely accepted by large sections of West Coast Moslems, brought the Syrians into sharp conflict with Western ideas, and threw their law of inheritance into such confusion that the Courts could not cope with it, and the tangle had to be unravelled by In other matters, however, legislation. the Indian elements, which are concisely summarised by the late Dr. W. Crooke in the introduction, seem relatively slight.

Mr. Anantakrishna Ayyar handles his material with the impartiality of a true scientist, and his tactful treatment of Christian controversy contrasts favourably with the acidity of some of his authorities. A word of appreciation is also due to the Cochin Government for the publication of this lavishly illustrated monograph. The book is well printed, and the plates are

excellent, but the proof-reading might have been more carefully done.

F. J. RICHARDS.

CORRESPONDENCE.

Sociology.

The Class System.

84

To the Editor of Man.

Sir,—In the March number of Man, Professor A. R. Radcliffe-Brown disapproves of my use of "bilateral descent." He writes: "Apparently what she means is the combination of matrilineal descent groups with patrilineal descent groups in one social system." As I cannot guess what Professor Radcliffe-Brown means by this statement, I must ask him to which of the three following conditions he refers:

(a) A community with two forms of descent groups, each having its own separate function which is recognised by the natives, one group being matrilineal and the other patrilineal, as

in Ashanti.

(b) A community in which there are two sets of descent groups, one with matrilineal descent and the other patrilineal, every individual belonging to one matrilineal and one patrilineal group and recognising the laws of both groups, whose functions may he more or less similar. This I believe to be the condition among the Herero, but as I am away from books I am open to correction.

(c) A community with a system such as the class system of Australia or Ambrym, where the matrilineal and patrilineal principles are so closely fused that unravelling them is at the same time the despair and joy of the sociologist.

In Australia the form of descent has usually been described as "indirect." Professor Radcliffe-Brown considers it to be "a combination of a matrilineal dual division and patrilineal local clans." Now, as I am away from all references, I am not certain of what I have written, but I do know what I mean. By "bilateral descent" I do not mean either of the conditions "a" or "b." In both these types of social organisation the matrilineal and patrilineal principles of descent are found working independently in one societythat is not what I mean by "bilateral descent." I used that term first to describe the form of descent in Ambrym, where Deacon discovered the 6-class system, where the matrilineal and patrilineal principles are so intimately fused that Rivers, who expected to find a matrilineal dual organisation, failed to recognise the matrilineal principle in descent at all. I suggested that it had come about by the fusion of two types of social organisation (and was thereby guilty of making an historical hypothesis) and further suggested that the Australian 8-class system had come about in a similar manner. It is therefore gratifying to know that Professor Radeliffe-Brown also considers the class system to be a "combination" of two forms of social organisation. His knowledge of Australian society probably warrants him in explaining "the class system as a combination of a matrilineal dual division and patrilineal local clans." I think here he refers only to the classes of Ambrym, but may

I ask whether this also applies (as I suppose it does) to the class system of Australia? Further, whether the "matrilineal dual Further, whether the "matrilineal dual division" is to be regarded as an exogamous matrilineal organisation of society into two groups of matrilineal clans, and that this form of social system has been "combined" another form of social system having local patrilineal clans? If this is so it must surely be supposed that these two social systems arose somewhere before they were " combined ' and that they actually functioned in two separate societies before the "combination' took place. We must be grateful to Professor Radeliffe-Brown for such an acceptable hypothesis, and it would be unkind to throw at him the gibe that it is "historical." Surely, with Professor Radeliffe-Brown's profound knowledge of sociology, it may be regarded as well founded !

It is particularly pleasing to me to find that Professor Radcliffe-Brown considers the Pentecost system to be a 6-class system, for it took me much time and trouble to work this out: an account appears in the current number of the Journal, which Professor Radcliffe-Brown could not have seen when he wrote his article in MAN. However, unless he has unpublished material I cannot agree that the tavalui are divided each into three verana. I supposed this to be so at first sight, but was later obliged to give up this idea. In a paper in the forthcoming number of the Journal I go further into the meaning of descent, and I still hold that "bilateral descent" conveniently describes a particular type of descent. This is not any "combination" of two forms of descent in one society but an intimate fusion of the two principles regulating the social organisation, especially with regard to marriage.

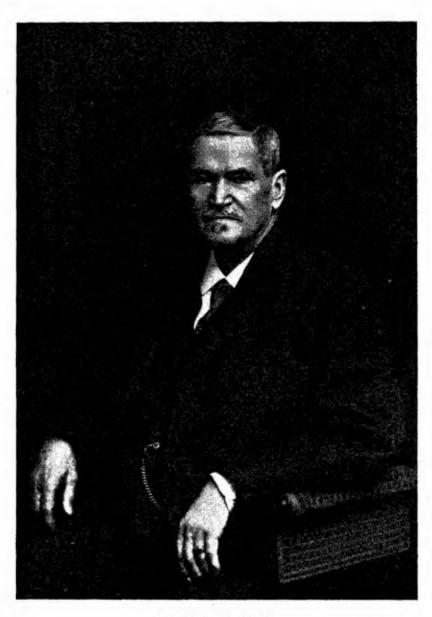
While I entirely agree with Professor Radeliffe-Brown as to the sound influence of the "functional school" on field work, I should like to point out that if work is to be virile the fundamental interests of the observer should never be disregarded. It is, I think, the glory of Anthropology that it can be "all things to all men." Workers whose real things to all men." Workers whose real interests lie either in history, psychology, evolution (surely a type of history), even in mechanics (the how a thing works) or social reform, can all become good anthropologists if they will be honest observers and not restrict their field of vision only to their personal interests. Further, in the application of the comparative method, which is used and abused by all schools, let them not dissociate facts from their context nor rush wildly from China to Peru.

With apologies for trespassing so far on your valuable space,

I am, Sir,
Your obedient servant,
BRENDA Z. SELIGMAN.

Tarascon-sur Ariège, 12th April, 1929.





DR. PAUL SARASIN.

ORIGINAL ARTICLES. With Plate G.

Obituary. Torday. Paul Sarasin, December 11th, 1856—April 7th, 1929. By E. Torday. With Plate G.

The world of science has suffered a heavy loss by the death of Paul Sarasin. The son of one of the most prominent patrician families of Basle, he received his early education in his native town. After obtaining his doctor's degree in Würzburg his interest in zoology induced him to undertake, with his cousin, Fritz Sarasin, his first memorable expedition to Ceylon. He returned after nearly three years with a rich harvest, which included observations made among the Veddas. In Berlin, where he was working up his material, he naturally attracted the attention of Baron von Richthoven and his circle, and it is perhaps to this influence that anthropology owes the planning and execution of a second expedition, devoted entirely to the study of the primitive Veddas. The results were published in the monumental "Die Weddah und die sie umgebenden Völkerschaften." With this work the two cousins rose at once to the foremost rank of field-anthropologists and their position was still further strengthened by their third expedition with its remarkable archeological discoveries.

The extraordinary wide range of the two cousins' scientific training found full scope in their expedition to Celebes, at that time practically terra incognita to science. The island was crossed and re-crossed, lakes Towuti and Matanna discovered, and natural history, geology, archeology and anthropology greatly enriched by painstaking and competent research. The journey was not without its dangers, and the great hardship it entailed affected the health of Paul Sarasin for the rest of his life. Yet, when the working up of the collected data revealed gaps and raised problems requiring solution, a second expedition to the island was undertaken in 1902. It was accomplished at considerable risk, and at one time the explorers had to suffer captivity, from which they were only saved by the timely intervention of the Dutch government. But its results, among which the discovery and study of the Toala will stand out, were of immense value and are enshrined in the five volumes of "Materialien zur Naturgeschichte der Insel Celebes."

Paul Sarasin spent the rest of his life in his beloved Basle, occupying his active mind with higher mathematics, with archeology, with aesthetics, or writing on the evolution of Greek temples from pile dwellings, or on Leonardo da Vinci, translating Aeschylus's Prometheus into German, or writing drama and lyrical poetry. Most of his time was taken up with the organization of the Basle museum, and it is to the cousins Sarasin that it owes the high position it occupies among ethnographical institutions. It was the untiring driving power of Paul Sarasin alone which brought the National Park of Switzerland, a sanctuary for flora and fauna, into existence. He worked hard to create similar reservations in all corners of the world, and was near his goal when the outbreak of the World War put an end to his scheme.

Though in his last years the tortures of illness made him retiring and shy, Paul Sarasin remained to the end a busy correspondent, always ready to help with sound advice and wide knowledge those who turned to him. He thus added to the legion of his friends. Fiery as he was, he often roused controversy which, as a good fighter, he never shirked, but even those who denied him their approval could not fail to recognise the honesty of his convictions and to admire, and love him for, his enthusiastic zeal.

E. TORDAY.

Africa, South : Sociology.

Schapera.

Matrilocal Marriage in Southern Rhodesia. By I. Schapera.

Among all the Bantu-speaking peoples of South Africa, an essential feature of any normal marriage consists in what is generally termed the custom

of lobola, i.e., the practice whereby some form of material wealth, usually cattle, is transferred from the family of the man to the family of the woman he is marrying, in consideration of that woman and, in particular, of her reproductive power, passing from her own family into that of the man. This practice is even now sometimes regarded as merely a form of purchase, by which the husband acquires a right of property in his wife. It need hardly be said that this view is completely mistaken. There is nothing in native life which lends itself to the supposition that the husband regards his wife as a chattel—he most certainly cannot sell her, nor can he wilfully ill-treat her without being held responsible by her family or even his own. Given adequate grounds for complaint, a woman is always at liberty to go back to her own people and have the lobola cattle returned.

The real significance of the lobola custom is to be found in the fact that it serves to legalise the children of a marriage. All these peoples are organised socially on a patrilineal basis, i.e., descent, inheritance and succession are normally reckoned through the father. But only children for whose mother lobola has been passed trace their descent, etc., in this way; and from this point of view it may be said that one of the main privileges attaching to the lobola transfer, as far as the husband is concerned, is that he thereby gains possession of any children born by the woman for whom he has given lobola, whether he himself is the physiological father of these children or not. On the other hand, children born to a woman for whom lobola has not been passed will belong to the family of that woman, and cannot be claimed by their father until he has paid, or agreed to pay, the lobola: What Lestrade says on this point with regard to the bogadi (i.e., lobola) among the BaHurutshe may be taken as applying, with certain minor variations here and there, to all the Bantu-speaking people of South Africa: "No marriage is legal " without the passing (or the formal contract with a view to passing) of bogadi " cattle. No children are the legitimate sons of their father unless that contract " has been made, whether or not fulfilled, in respect of their mother. No man " can claim, for any purposes, the children he has by any woman until he and " his family, on his own behalf or on behalf of some other male relation whose " representative he is, have contracted to pass, and under certain circumstances " until they have actually passed, the said bride-price."* Children who are illegitimate in this way have an inferior social status, and while they take the name of their mother's family they do not inherit from or succeed to their mother's father or brothers unless there are no legitimate male heirs.

From this it will be obvious that in order to establish a claim to the children he may have by any woman, it is essential that a man should have passed, or undertaken to pass, lobola cattle for that woman. In association with this, we find that the woman always leaves her own home at marriage, and goes to live

with her husband and his people, i.e., the marriage is patrilocal.

This is the normal rule among all the Southern Bantu. But in some tribes of Southern Rhodesia who also belong to this group, we find that under certain circumstances the husband does not pass lobola for his wife, and yet is entitled to claim any children she may bear. Where this is the case, however, the woman does not leave her own home at marriage; instead, the husband takes up residence with her family. In other words, marriage in such cases becomes matrilocal, in contrast to the patrilocal marriage which normally prevails among the Southern Bantu.

^{*}G. P. Lestrade, "Some Notes on the Bogadi System of the BaHurutshe," S. Afr. Jour. Sc., Vol. XXIII (1926), p. 938. Cf. (Mrs.) A. W. Hoernlé, "The Importance of the Sib in the Marriage Ceremonies of the South-Eastern Bantu," S. Afr. Jour. Sc., Vol. XXII (1925), pp. 481-492, esp. p. 483. I hope to deal in more detail with the connection between lobola and legitimacy in a forthcoming paper on "The Concept of Legitimacy among the Southern Bantu."

This interesting variant of the normal marriage rule occurs among the Mazizuru, Makorikori, Wabudjga, Bafungwi and a few other so-called "Mashona" peoples of N.E. Mashonaland, where it is known as the "ku garira custom." Here also marriage is generally accompanied by the passing of lobola, which among these peoples consists of from four to eight head of cattle and nowadays also £10 to £20 in cash. When this lobola is paid, the wife goes to live with her husband, and her children, of course, belong to him as well. In case of divorce, she returns to her parents, who keep one head of cattle for every child born to her, the balance being returned to the husband, who also retains control of the children.

Inheritance and succession are in the male line. The eldest son by the first wife inherits everything except his own mother, who usually goes to a brother of her deceased husband. If there are younger brothers by other wives, the heir is responsible for the lobola cattle for them, the rule being that a man is entitled to the full lobola paid for his sister by the same mother, using this lobola as the means of acquiring a wife for himself. If the younger brother has no sisters, then he is entitled to the cattle paid for his mother (if she marries again), and if the elder brother accepts the inheritance of this mother, then he becomes responsible for the cattle. If the mother should refuse to be inherited, then her parents become liable for the return of the lobola paid for her.

It often happens, however, that a man has no cattle with which to lobola a wife for himself or a sister by whose marriage he could acquire such cattle. What he does in such a case is to make an arrangement with the girl's father or guardian, by which he is allowed to marry her, but has to take up his residence at her parents' home, and to serve them as long as he remains there. The ceremony is

described as follows by "Chigumi" (op. cit.):-

"The girl and youth having plighted their troth and given each other a " pledge of regard, probably a bracelet or ear-ring, the son-in-law elect sends a 'rutsambo,' which may be described as a token of approval of engagement " (formerly, as likely as not, a few beads on a string) by a 'dombo' or bridegroom's " deputy. If the alliance is agreeable to father-in-law, the 'dombo' would return " and say 'Wakatambira'—literally 'they received.' Some time afterwards "the 'dombo' would go with firewood of the 'muwanga' tree of even lengths, " nicely pointed at the ends. This would be carefully placed at mother-in-law's "door, 'dombo' kneeling. Mother-in-law gives thanks and 'dombo' partakes " of food which she has cooked. Son-in-law is in the vicinity, but sleeps fasting. " Next day the bride-elect brings water to the male aspirant for him to wash; " he leaves her a present in the empty pot. About mid-day food is brought to " him by his wife-to-be; this is known as 'chisangano' or 'chiwingainga,' and " is the first time they eat together. The girl's reserve has to be thawed " ('kushonongora') by presents and kind words; gradually she responds, and "they laugh and joke together. The firewood might be distributed, a piece each " to relatives to let them know the son-in-law (' mukuwasha '-otherwise the seeker, from 'kukwasha') had arrived.

"This continues for a time, all depending on the age of the girl, as she may " not have reached the age of puberty. When this latter event has occurred, " and when they have had intercourse (secretly, as they are not yet housed " together), which may be found out by pregnancy or examination of the female " by old women at the bathing-place ('mashambo'), the husband has to go to

^{*} This custom is briefly described by C. Bullock, Mashona Laws and Customs (Salisbury, Rhodesia, 1913), pp. 17-18, and in an article, "'Kugarira' or 'Ugariri'," by "Chigumi," in Nada, 1923, pp. 79-81. For most of the data contained in the present note, however, I am indebted to the Native Affairs Department of Southern Rhodesia, which very kindly circulated a questionnaire of mine on this and related topics among its Native Commissioners, and gave me ready permission to make use of the replies received.

"his own kraal, and get 'masungiro,' otherwise fastenings, say, a cloth and 5s., " which his 'wife ' carefully, in the early morning, lays on her mother's threshold,

"The old lady, on opening her door and seeing them, announces their arrival to " the father-in-law, who would probably keep the money and give her the cloth,

" which has to be worn to keep the back strong and free from pain.

"The son-in-law has then to find 'mapadza'; in olden times a single hoe, "nowadays the process is more costly. Again, a 'nowura muzimu' or offering " to spirit of the father-in-law is required; that might be any small article.

" If penniless, lacking 'mapadza,' the son-in-law and prospective serf is told " to climb up a tree as a sign to folk that he is in future a bondsman. "to have his head shaved, too, hanging downwards from the tree. This makes "him a son of the place, known in the vernacular as 'muranda' or 'buru.' "This ceremony is called "kutema korowa'."

From now on the man, who is henceforth known as mgariri (from gara, to wait or stay), is the accepted husband of the girl, and has his residence with her people. As long as he stays there he has to obey the commands of his father-inlaw, and to perform various services for his parents-in-law, such as doing the heavy work in the gardens, keeping his mother-in-law in firewood, taking the place of his father-in-law when the latter is called upon to do any work for the chief, and so on,

If at any time he wishes to break away from this servitude, he can do so only by handing over to his wife's father either the first-born daughter of the marriage or the lobola paid for this daughter, or by paying cattle obtained by his own labour, so long as this labour does not interfere with the service he has to render to his parents-in-law. Until he is able to do this he may not leave his wife's village and take her with him. Even a term of years of service does not release the mgariri from his condition of bondage. Only the payment of another female, or the means of getting one, makes him free to move to a kraal (village) of his own choice. Here, if desirous of another wife, he may even resort again to the ku garira system until he is able to release himself and take his wife with him.

But although he may continue to reside at his wife's village for a considerable period of time before obtaining his release, he always has full claim to his children. The mother's family has no legal rights over them, although it does happen that owing to the matrilocal residence their mother's father and brothers will often exercise considerable authority over their behaviour and occupations. The child of such a marriage inherits from his father, takes his father's mutupo (totem and family name), and if the father should die before he has terminated his servitude, then the son who inherits will have to compensate his mother's family. Or, if the son is too young, a brother of the mgariri may take his place and liabilities, inheriting his widow. Moreover, the lobola for the daughter of such a marriage is always paid to the mgariri as father, and he is responsible to his son-in-law for the return of the cattle in case of divorce, even if he himself has used these cattle to terminate his servitude.

It will be seen, therefore, that here matrilocal marriage is in no way connected with what is generally termed "mother-right." The residence of the husband with his wife's people is not due to the prevalence of matrilineal institutions, nor does it lead to the existence of such institutions. On the contrary, all the evidence goes to show that, even with the matrilocal residence, descent and inheritance are still reckoned through the father. Perhaps the only feature that may be claimed as a symptom of mother-right is the fact that the male relatives of the mother may exercise some authority over the children; but against this (which, after all, is what one would expect to find with matrilocal residence) must be set the very significant fact that the father has a full legal claim to his children and takes them with him when he finally terminates his servitude and sets up a kraal of his own.

What this ku garira custom does bring out very strongly is the fact that here matrilocal residence is determined primarily by economic factors, and that even in the same society, and under the same patrilineal institutions, both patrilocal and matrilocal marriage may occur side by side. It is only when the man cannot afford to lobola a wife in the first instance that he goes to live with her parents and to serve for her. I have, unfortunately, no exact information as to the proportion of these ku garira marriages, but they would seem to have been fairly numerous at one time, especially as cattle do not thrive in these areas, owing mainly to the tsetse fly and climatic conditions. Nowadays the custom is apparently dying out fast, as even those natives who have no expectation of cattle from their family with which to marry a wife are now able to earn money by work for this purpose.

It seems fairly obvious also that here matrilocal marriage with the consequent servitude of the husband does not dispense with, but merely is a temporary substitute for, the payment of lobola. The mgariri can always, and in fact always seems to, terminate his servitude as soon as he can obtain the necessary cattle. In any case, the marriage of the first daughter of such a marriage in itself serves to release the man from his condition, the cattle obtained as lobola for her being transferred to his parents-in-law as lobola for his wife. Moreover, the legal status of the children of such a marriage is in no way affected, whereas elsewhere in South Africa the children of a woman for whom lobola has not been passed always belong to the family of their mother. It is possible that from this point of view we may even be able to regard the custom of ku garira as constituting a contract for the ultimate payment of lobola.

Nevertheless, with its clear indication that matrilocal marriage may occasionally be due entirely to economic reasons, the custom is of considerable theoretical interest, and affords a strong argument against those generalisations which maintain that matrilocal residence is invariably symptomatic of, if not determined by, the so-called "matriarchate."

I. SCHAPERA.

Africa : West.

Peake: Braunholtz.

Earthenware Figure from Nigeria in Newbury Museum. By H. J. E. Peake and H. J. Braunholtz.

This earthenware figure, given to the Museum by Mr. Tucker, was dug up at one of the gates of Kano in the course of railway construction. It is 17½ ins. high, covered with a brown umber slip, discoloured and stained blackish towards the base; the hair seems to have been coloured black originally.

H. J. E. PEAKE.

The earthenware figure in the Newbury Museum appears to be identical in almost every respect excepting its seated position with a standing figure illustrated in C. K. Meek's "The Northern Tribes of Nigeria," Vol. II, fig. 98, which is there described as an "Ankwe household deity, Muri Province," and is presumably modern. The resemblance extends to the headdress, features, scarifications on the face, ringed neck and neck ornament (which are identical), breasts, armlets and even the modelling of the toes, and is so close as to preclude the possibility of distinct origins for the two figures. Since the Ankwe inhabit the country between the Bauchi plateau and Benue River some 3 degrees South of Kano, the provenance of one of these 2 figures obviously requires explanation. Although the Ankwe belong to a linguistic group, which is related to the Hausa, and appear to have migrated from the North to their present habitat, it is hardly likely that the Kano figure can date back to a hypothetical former occupation of that region by the Ankwe, if only because their own style of modelling figures would presumably have undergone some change in the interval. It seems more reasonable to suppose that the Kano figure was transported thither from the Ankwe country at no very distant date, and there buried, or alternatively that Meek's Ankwe figure is an importation from the North.

Meek mentions the occurrence of pairs of earthenware figures, male and female, in family shrines of neighbouring tribes of the Ankwe, and states that they are fertility deities. The prominence of the breasts in the figure illustrated suggests





that it may have had a similar function. Such pottery figures are rare in Museum collections, and there is not one specimen in the British Museum from West Africa. Further data regarding the excavation might help to throw light on the age of this figure. H. J. E. PEAKE. H. J. BRAUNHOLTZ.

Africa, East: Prehistory.

Wayland

African Pluvial Periods and Prehistoric Man. By E. J. Wayland. The interesting remarks under "News and Views" in the issue of Nature for March 16th with reference to Bushveld Man and Mr. Leakey's discoveries in Kenya call attention, once again, to the "Pluvial" periods of Eastern Central Africa. It is high time that the true position with regard to these "Pluviations" should be pointed out, for prehistorians, who look to the geologist for dating in these matters, have to take the latter's opinion very much on trust, and the assurance with which Pluvial periods have been claimed by some workers has led, I find, to an unjustified feeling of security among archeologists with regard to the chronological correlation of stone-age industries in widely separated countries.

My colleagues and I have been working on the geology of Uganda for the last ten years, and have accumulated a vast quantity of data (most of which is unpublished) with reference not only to the solid geology but also to the more superficial deposits. For my part I have never missed an opportunity to study the prehistory of the Protectorate, and my efforts in this direction have been most generously assisted by the Percy Sladen Trustees. It is hoped that by 1931 it will be possible to publish a more or less connected account of the Pleistocene events (some of which are highly remarkable) of this part of Africa; meanwhile it may be well, for reasons stated above, to make known some of the tentative conclusions at which I have arrived.

Field evidence rapidly led me to believe in at least one and possibly three Pluvial periods, and some reference was made to this in the first published "Annual Report of the Geological Survey of Uganda" (March 31st, 1920). Later it was found that the problems of stream rejuvenescence had a twofold aspect, tectonic and climatic, and a difficulty arose in determining the contribution of each of these factors in the formation of terrace gravels. Recently, however, the key to this riddle has been discovered, and it is now possible to tabulate, with a fair degree of confidence, the

major events in the Pleistocene history of the country.

In the matter of dating, we are assisted by three moderately well fixed points. First, there are the Oligocene (probably late-Oligocene) earth movements which ushered in the events that have superinduced the present topography upon an older one. Next, we have a mid-Pleistocene dry period (dated on palæontological evidence); and, last, a moist period immediately preceding the present. Into this framework other events, evidenced by river gravels, lake deposits, unconformities and other structural features, fall naturally into place; and the effects of earth-movements on the one hand, and climatic changes on the other, can be checked by field evidence gathered in widely separated districts. Thus the interpretation to be given to x at A may not, perhaps, be clear, but may become so when y, the equivalent of x, is studied at B, and similarly z at C. The extreme importance of determining the exact equivalent of x, y and z is thus apparent and can hardly be overstressed-indeed, it is the crux of the whole problem. To take a case in point: The gravels of what we call the 175 foot terrace of the Kafu river were brought into existence by the appearance of a new and lower base level consequent upon tectonic disturbances; but the internal evidence of the gravels themselves suggests (but is very far from proving) a climatic change from dryer to wetter conditions during the days of the gravel deposition. Now, beds in the lower reaches of another valley far away (the Muzizi valley) which on the local (Muzizi) evidence are seen to be the equivalent of the 175 foot terrace of the Kafu can only be interpreted as due to a rise of Lake Albert, and as far as one can see at the moment that rise must have been in origin climatic; for, inasmuch as the earth-movement that brought in the 175 foot (Kafu) terrace was one which affected vast areas of country in the vicinity of the Albertine Rift, the lake level should have subsided unless the effect of the subsidence of the Rift floor was counteracted, or more than counteracted, in the lake by a longcontinued spell of heavy rainy seasons. Also, some ancient beach gravels of Lake Victoria, supposed on good evidence, as far as it goes (but not proved) to belong to 175 foot (Kafu) days, show evidence of a rise of water level, and in one place overlie This evidence, and a little more of a similar kind, constitutes the ground for belief in a climatic change in 175 foot times which, because of their place in our dating frame, must have been early Pleistocene (perhaps including late Pliocene). The change appears to have affected the whole of the Protectorate, and cannot have stopped exactly at its boundaries. It may or may not have been a local expression of a world event, but the suggestion that it was so is conveyed by the fact that at this time the Günz-Mindel Pluvial should have occurred, and for these reasons the 1st Pluvial is tentatively accepted—the view adopted being one favoured by several authorities that the Günz-Mindel interglacial was a purely local occurrence. There is abundant evidence of a similar, but much more striking, change after the mid-Pleistocene dry spell. Its effects are to be seen all over the country—this is regarded as the 2nd Pluvial. It was clearly one of very long duration, but it finally faded into a comparatively short period of aridity-unless the evidence of the ubiquitous red earth has been wrongly interpreted. This was followed by the subrecent moist period, which can hardly be called a Pluvial, though its rainy seasons were doubtless a good deal more pronounced than those of to-day. It was the days of epi-Palæolithic (Magosian) man. The 2nd Pluvial was essentially that of mid-Palæolithic man, and the 1st Pluvial that of pre-Chellean man. No unquestionable

Chellean, Acheulean or Neolithic remains have vet been found in Uganda.

The sub-recent moist period is altogether too recent and too slight to be regarded as Würm in age. If anything, it is Bühl, and thus contemporaneous with Miss E. W. Gardner's Neolithic lake of the Fayûm. That being so, it is to be expected that the 2nd Pluvial of Uganda is the equivalent of the Mousterian lake of Würmian date of the Fayûm, and in this connection a curious and perhaps significant coincidence is apparent. It is this: On the correlation suggested, the 280± breach of Lake Victoria—interpreted as the 2nd Pluvial breach—shows a marked and prolonged rest, during its decline, at the 225± level; the 278 foot Fayûm lake shows a similar rest at the 222 foot level. The very close agreement in these altitudes is partly a matter of pure coincidence, no doubt, but the fact of the rest occurring in both lakes is likely to be significant, and may, perhaps, solve a difficulty.

If the last moist phase was Bühl, the 2nd Pluvial Würm and the 1st Pluvial Günz-Mindel, what has become of the Riss? Starting, as it does, immediately after, or during, the middle Pleistocene, the 2nd Pluvial should, on the Glacio-Pluvial theory, be Riss, but, if so, what of the Würm? Does it not look as though the 280± lake was Riss and the 225± rest, during the Rissian decline, Würm? Or, in other words, that the Riss-Würm interglacial was a comparatively minor

occurrence? If this is so, then we have-

Pluvial.	Date.	Industry.
Epi-Pluvial	Bühl	Magosian (epi-Palæolithic)
	Achen	9
2nd Pluvial	Riss-Würm	Sangoan ("Mousterian" with local
		facies)
	Mindel Riss Interpluvial	?
1st Pluvial	Günz-Mindel	Kafuan (Pre-Chellean, cf. Darmsden)

On this dating the 3rd Pluvial of the Kenya Archæological Expedition becomes the equivalent of my epi-Pluvial, and Nakuru man no older, and perhaps younger,

than the Fayûm Neolithic.

The difficulties that have to be faced by the Kenya Archæological Expedition are, perhaps, greater than has been realised hitherto. A change of sedimentation from a silt to a gravel, on the superposition of a gravel upon a land surface, does not, by itself, constitute evidence of a Pluvial period. Nor can a Pluviation be deduced from the study, however close, of a limited area. In the Elementeita region reconstruction of older sediments may simulate an important breach which did not in reality exist as such for any length of time; and as the Rift Valley in Kenya is hardly likely to have been more stable than that of Lake Albert, an intermittently sinking, and occasionally tilting bottom, with all the complications that it introduces, must be considered as a possible factor in the interpretation of the rest levels. It appears significant, however, that the Expedition's 3rd Pluvial (= my epi-Pluvial) contains artifacts of epi-Palæolithic culture—at any rate a microlithic industry-while the Expedition's 2nd Pluvial (= my 2nd Pluvial?) contains "Mousterian" artifacts, if only as intrusives—the bulk being microliths. But I gather from Mr. Leakey that his 1st Pluvial (= my 1st Pluvial? = Günz-Mindel) also contains microliths. This seems a little odd; and it is worth while enquiring whether, after all, there is not some error of correlation somewhere. Perhaps I am wrong, perhaps Mr. Leakey is wrong, perhaps both are right, in which case we have some most interesting problems of culture, origin and distribution to solve.

The Glacio-Pluvial correlation is seductive, and for that very reason demands wary approach. I personally think that, in one form or another, it will eventually be found valid and acceptable alike to geologists, meteorologists and prehistorians; but at present it is pure hypothesis. The danger of premature conclusions in this matter may be illustrated by the fact that should the meteorologists desire a Pluvial period in Early Miocene times evidence sufficiently "conclusive" for the purposes of those investigators, whose efforts are characterised more by enthusiasm than judgment, can be produced from Karungu bay in Kenya Colony.

E. J. WAYLAND.

India: Religion.

Codrington.

Spirit Possession. By K. de B. Codrington.

In Man, September, 1928, 115, Mr. Krishna Ayyar reported a case of spirit-possession in Calicut, under the title of "Chathan, a Devil or a Disease?" The phenomena consisted of the defilement of the living-place, kitchen and utensils with human excrement and hair, the spilling of water coloured with turmeric and saffron, the violent movement of inanimate objects and finally, the spontaneous combustion of clothes and palm-leaves. In Man, March, 1929, 38, Mr. F. J. Richards reported a case from Arantangi, Tanjore district, where seven houses of the Brahman village were set on fire, the whole village suffered a bombardment of stones from unseen hands, and kitchens were desecrated by clippings of human hair and nail-parings, mixed with blobs of rice coloured with turmeric and prickly-pear juice. According to Mr. Krishna Avyar such phenomena are to be laid at the door of Kutthi-Chathan, or, in other words, a spirit who has no will of his own but is merely the instrument of some evil-intentioned person skilled in the Black Arts. He also points out that the Nambudiri families of Kallur and Kattumadam are famed as exorcisers of such spirits, and the Parayans of Tolanur as practitioners in magic. Mr. Richards also points out that the Palghat Brahmans of Malabar are immigrants from Tanjore.

However, the phenomena discussed are very much more widely spread—in fact, they occur over the south and the Deccan as a whole. Their universal similarity is noteworthy. They do, however, seem to fall into two classes. The bulk of the cases is simply a matter of straightforward Black Magic, actuated by motives of revenge or blackmail. Certain of them, however, are cases of simple spirit possession, not only by subservient spirits such as Mr. Krishna Ayyar's Chathan, but by any offended spirit. On p. 557 of Vol. XVIII, Pt. I of the Bombay Gazetteer, two cases of this kind are reported. The first is a case of multiple possession. A young married woman is seized with convulsions and is exorcised with incense, cut lemons and flagellation. From her issue seven spirits—the spirit of her husband's dead wife, of her disappointed lover, of two Maratha women whom she seems to have offended casually while passing by, of a Kunbi man who had died from snakebite, and of a Brahman and a Munja, whose vindictive possession of the young woman seems to have been entirely without provocation. Most of these were rendered powerless by being made to confess their identity, and were then securely nailed into a tree. The second case is that of an oil-maker's daughter who offended the spirit of a pipal-tree by throwing bones at its foot. Eggs and live coals fell from the ceiling and the oil-maker's wife's anklets were removed from a locked box and also fell from the ceiling. The spirit was exorcised with charmed gram (phaseolus radiatus), after a promise of purification of the tree and offerings of food and flowers had been made. These cases occurred in the Poona district.

It seems that spirits may be looked upon as being of two kinds. The first are family spirits, such as ancestors who have suffered untimely deaths or whose rites have been neglected. The second are random spirits who may afflict anyone.

These have local names and sometimes definite habitations. Among them are suicides, childless women or those who have died in child-birth, unmarried Brahmans, misers, or even local heroes or saints. Sometimes a tree or a red-daubed stone will become famed as the dwelling-place of a spirit, and in time such a shrine may come to rank among the guardians of the village. On the Ajanta Ghat there is a red-daubed rock which is worshipped with red-lead, ghi and broken cocoa-nuts. I was told, three years ago, that this was the shrine of Mahsoba, one of the best known and most widely spread of these godlings. His worship was religiously attended to at the time because he had broken a man's arm near by with a fall of rock.

It would seem, therefore, that a distinction should be drawn between spirit possession of the local cult-type and pure Black Magic, though, as in Mr. Krishna Ayyar's case, the magician may sometimes use individual spirits. The phenomena of all these cases are strangely uniform: a member of the household is seized with convulsions or tries to tear off his or her clothes in the street; things move of their own accord or fall from the ceiling; kitchens and utensils are defiled by filth, and finally clothes in a jar or chest, or the house itself, bursts into flames. In the Deccan the Dhobi class is held in especial repute as having magical powers. A Dhobi Black Magic puppet from Haidarabad, given by Dr. E. H. Hunt, is in the Pitt Rivers Museum. Abundant evidence is to be found in the files of most police-offices. It is clear that the possibility of such phenomena not only arises from superstition, but from an elaborate organisation of accomplices. K. DE B. CODRINGTON.

America, South: Games.

Herskovits.

Adjiboto, an African Game of the Bush-Negroes of Dutch Guiana.

By Melville J. Herskovits.

The Arab game of mankal'ah, as is well known, is found, in various forms, widely spread over the whole of Africa. So characteristic is it of the culture of the Negroes, in fact, that Culin, in 1896,(1) termed it "the national game of Africa." It is not strange, therefore, that this game is to be found in a culture which exhibits as many African traits as does that of the Bush-Negroes of Dutch Guiana. It has not, however, been described in any detail, to my knowledge. Since it differs in important aspects from the various forms of which we have reliable knowledge, and since information of the moves of the various types of this game, and its cultural setting among the various peoples who play it, are of prime importance in any study of distribution involving it, I give here the circumstances of its discovery and use, the rules of the game, and what I have been able to establish of the point of its origin in Africa. It is sincerely to be hoped that those who are in the field where this game is played will take the opportunity to learn the moves and to make careful note of the character of the board on which it is played, as well as attitudes centreing about it, so that detailed comparative study may be possible.

The board which is illustrated was found by me during the past summer (1928) in the course of a field trip to the Saramaccaner tribe of Bush-Negroes of Dutch Guiana, in a village on the upper Suriname River called Beidotti.(2) When I first observed it, it was resting in an open hut, variously utilised as a meeting-place for the gan sumba, or village council of old men, and as a kre wosu, or house of mourning in which the dead are placed until the ten-day period preceding burial shall have passed. The same open hut is also available to accommodate the rare traveller who wishes an enenclosed hut in which to pitch camp, and it was in this last capacity that the house served when we stopped there. On asking its name, I was told it is called adjiboto, adji being the name of the bean with which it is played, boto (boat) the term for the board. As is to be noted from the reproduction, the board is certainly not in the form of a boat, but has the crude likeness of the four

legs and belly of some animal. However, since the life on the river forms such an important part of the culture of the Bush-Negroes, I dismissed the matter without

further thought.

The game is played by two players, each of whom uses five of the ten playing-holes, and an extra hole for captured pieces called his boto, to his right. Each player has fifty beans, which he places ten to each of his five playing-holes. The play commences when the first player, selecting any hole on his side of the board, takes out nine of the beans, leaving one in the hole from which he played, and distributes them, one to a playing-hole, moving around the board in a counter-clockwise direction until the beans in his hand are exhausted. His opponent then selects a hole on his side (in which there will now be eleven beans) and does the same. In the first ten moves of the game, all of the ten playing-holes must be emptied, and it is

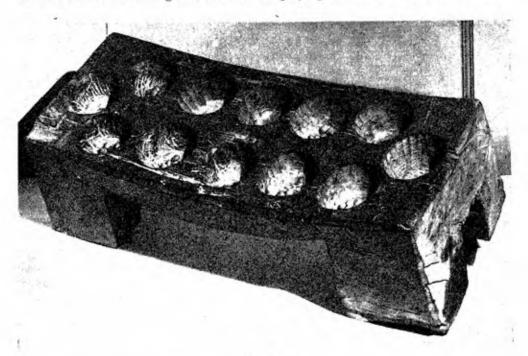


Fig 1.

only after these more or less formal moves, which get the game under way, have been played that the essential tactics can show themselves.

The object of the game is to reduce one's opponent to a position where it is impossible for him to move. To this end, beans are captured in the following manner: if, after distributing the beans which have been in a given hole the final bean falls into a hole (the native term being kaba, "to end") which precedes another hole containing 1, 3, or 5 beans, or any sequential combination of ones, threes or fives, he captures these beans and places them in his boto—the hole at his right hand. The only exception to this rule is the opening move of the game, since the final bean must fall in the hole preceding the one where play was started. This bean cannot be captured. It makes no difference whether the captured beans be in holes on the player's side of the board, or on his opponent's, he must take if he ends before a hole having 1, 3, or 5 beans.

When beans are distributed from a hole, one must be left, nor may a hole containing only one bean be played. Empty holes can only result from a capture.

Therefore, when the play has reduced the number of beans, and the holes of one's opponent contain no beans or only one apiece, he is unable to move in his turn, and the game is lost. There is a way, however, in which the game may be tied: after one player can no longer move, he redistributes the beans in his boto, that is, the ones he has captured in the course of the game, into the holes on his side. If he can fill his holes, or, in other words, if he has captured fifty beans during the play, the game is a draw. This is signified by drawing the finger across the centre of the board, between the opposing holes, something I never failed to see a Bush-Negro do when the game was drawn in this fashion.

It will be seen that skill in playing the game consists of the utilisation of foresight so that one will end one's play before a hole filled with the number of beans which one may take, or, better still, if there are a large number of beans in a given hole on one's side, of filling the opponent's holes in such a way as to arrange the capture of beans in a sequence of holes on this or on the following move. The defence in this latter case would be to fill the exposed holes so that, on making the proper move, the end of the opponent's attacking play would be before a hole in which, e.g., 2 instead of 3 beans were lying. The Bush-Negroes do not hesitate to take the beans from a hole that is well filled, and carefully count the number of beans to be played and consider the resulting situation, returning them if this would not be favourable. I have had them take back a move already made when a subsequent move on my part resulted in the capture of a large number of beans from my side, but this is not considered good form, and those watching the game murmured their disapproval; I could undoubtedly have prevented such action had I not been more interested in my opponent's desire to win than in winning the game myself.

The presence of this game among the Bush-Negroes has been mentioned, but not described, by Panhuys.(3) In the same volume, however, the corresponding game known to the Negroes of the coastal region of Suriname, awari is discussed at somewhat greater length, but few details of the play are proffered.(4) I myself did not learn this version of the game, except that it is played on a board having 12 holes in each of which 4 beans, called awari, are placed. The name given by the coastal Negroes to the board is awari bangi (awari-stool), and the object of the game is "to load the six holes on the side of the opposing player with all 48 beans."(5) Thus it will be seen that, though fundamentally similar, the character of the board, as indicated by the number of holes in it, the number of counters placed in each hole, the nature of the play and the object of the game, are quite different from the game played in the bush. The adji bean is a large red bean with a black spot; the awari seed is grey in colour.

The problems of the light which the facts stated above may throw on the African source of origin of this game, and on the tenacity with which cultural traits may be retained by a people who have been uprooted from their aboriginal cultural surroundings, are the ones which present themselves at once for consideration. Since the two are intimately related, we may obtain insight into the second by an examination of the African data relative to this game, as far as we know the details of the manner in which it is played there. As Culin has stated, it is found all over the continent. Since he has written, a few descriptions of it have been given. The most notable one from East Africa is that of Junod, (6) who describes the game among It is, however, essentially different from adji-boto; it is called tschuba. The holes are dug in the ground, there are two rows of four holes to a row for each player (there may be more holes than this, and more players than two), nor is the name of the game taken from that of the bean used. Lindblom's description of the game as played by the Akamba, (7) and the similar game described by Merker (8) for the Masai, are obviously widely variant from those played in Dutch Guiana, the holes being in two rows of 10 or 20 each, for example.

It is not until we reach the West Coast of Africa that we begin to see larger similarities. Talbot,(9) for example, figures a board with carved ends and legs, which has twelve playing holes, plus one at each end for captured pieces. Among the Ibo it is called "Okwe, the name of the tree from which the seeds used for counters " are obtained. Each person tries to drop his last one opposite the hole in which " his opponent has one or three, and, if he succeeds, captures these." The most valuable description of the game, however, is that given by Bennett.(10) It is unnecessary to reproduce here the rules, which are given with great clarity and an admirable wealth of detail, but certain resemblances must be noted. There are, on the Ashanti board, two parallel rows of six cups each, into each of which are placed four pebbles—a striking resemblance to the town game. There are, also, end-holes to contain the captured men. A "player wins pebbles when . . . the last " pebble falling in one of (his opponent's) cups . . . makes 2 or 3 pebbles in that " cup. Captures may consist of any number (up to six) of 2's and 3's provided ethat " they are in consecutive cups (of the opponent) and that the last of the series of cups " receives the last marble dropped." Here again there are certain resemblances to Dutch Guiana—the capture in series, for instance, although there are also distinct differences. I regret that detailed comparison of the Ashanti game with that played by the Negroes of the coastal region of Dutch Guiana is not possible, but there is enough to show that the resemblance is rather between these two than between the Ashanti game and adjiboto. This impression is strengthened when the name of the game in the Negro "taki-taki" dialect is compared with the Ashanti name, the one being awari the other wari—a startling similarity.

The most valuable hint as to the possible provenance of the game as played in the bush came from the reading of Culin's paper, referred to above. Among the numerous boards figured in this paper are several from "the French settlement " of Benin, on the west coast of Africa, in the so-called Dahomey village at the "Columbian Fair," which, I noticed, were of a narrow crescential boat-like form, and were elevated from the ground by means of a small pedestal-like base in the centre of the board. Culin goes on, however, to state: "They played on a boat-" shaped board, with 12 holes in 2 rows, which they called adjito, with pebbles " adji, the game itself being called Madji."(11) This, it would appear, is more than For if it is held that the Bush-Negro word adji is sufficient coincidence. explanation in itself, one may ask why this word is applied to just this bean? That it is an African word, like so many in the "Sa'amacca tongo," as the language of the Saramaccaner tribe of Bush-Negroes is called, is obvious from a comparison of possible American-Indian or European sources of origin. That it was applied to the bean with which the game the ancestors of these people were familiar with in Africa was played, seems logical. And that these Negro slaves from whom the present-day Bush-Negroes descended came from the region of the Gold Coast is well known. When this is coupled with the designation of the block-like Bush-Negro board as a "boat," referred to above, it becomes even more apparent that we have here a striking case of cultural survival, which serves to give both insight into the provenance of the Bush-Negroes and the manner in which some of the less obvious aspects of culture may remain with a people in spite of their cultural vicissitudes.

One other point in relation to the adjiboto, which has to do with its place in the culture of the Bush-Negroes as a whole, remains to be described. Unfortunately, as far as I know, there are no records of the game in Africa being associated with religious or other ceremonial practices; as a matter of fact, I know of no accounts of the attitude which any people who play the game have towards it. And in view of the fact that these are of perhaps even greater importance in establishing provenance for the study of cultural processes, this is to be regretted. My companion on this

trip to the Bush-Negroes, Dr. Morton C. Kahn, (12) went on an independent trip down the Suriname river and up the Sara Kreek to the Aukaner tribe of Bush-Negroes for the purpose of collecting specimens, during our stay in the bush. In the region of Koffiekamp (13) he noticed one of these boards, and attempted to buy it for his collection. It might have been possible for him to acquire it, but one of his paddlers stated that if the board were placed in the boat, he would refuse to enter it. Hence when I saw the board figured here, during an independent trip further up the Suriname river, I was cautious in making inquiries about it, until I saw that there was apparently no esoteric significance; several of the young people, learning how to play, used the board in my presence, and I was even able to take notes on the rules of the game and to commence my own process of learning it, being taught by the head-man. It was with some difficulty that the board was bought; it seemed to be the property of the village, and a council had to be held before consent was given to allow its purchase.

This difference in attitude between Dr. Kahn's paddler and the people of Beidotti somewhat puzzled me, for neither on the part of the owners of the board nor of my paddlers (one of whom was himself from Beidotti) was there any sign of aversion to having the board about, nor of discussing its use. On my return to Paramaribo, I mentioned the matter to Mr. A. W. van Lier, who has had long experience among the Aukaner tribe. He at once asked me if Dr. Kahn's paddler might be regarded as "orthodox"-as one who observed the minutia of the aboriginal beliefs. On my reply that this was quite possible, he stated that this game (and also riddling) constitutes one important means of amusing the yoroka, or spirit, of the dead man as he lies in the kre wosu. A dead body must be watched, and after the watch has been set the adjiboto board is brought in, and either this game is played or "riddling" is indulged in most of the time the body lies awaiting final disposition. The result is that it is felt that the spirits of the dead may cling to an object of this kind and that grave danger might result in running the dangerous rapids with which the rivers abound, since these spirits would be instrumental in causing disaster.

Whether there is a feeling of this kind about the mankal'ah board elsewhere it is used, I do not know, nor do I know whether there is this ceremonial association with it among any of the African peoples who play the game. The importance of this attitude in making comparisons and tracing the exact provenance of the ancestry of the Bush-Negroes is enormous, and it is to be hoped that for this purpose, as well as for the general understanding of the manner in which different and non-related elements of a culture may be found to have a close psychological association in the minds of the people living in that culture, more data on the points brought about in this discussion may be made available by those in the field.

REFERENCES.

(1) S. Culin: "Mancalah, the National Game of Africa." Annual Report U.S. Nutional Museum, 1896, pp. 579-607.

(2) This trip was made under the auspices of the Council for Research in the Social Sciences, Colombia University, by means of a grant from Dr. Elsie Clews Parsons, whose aid in my research it is a pleasure gratefully to acknowledge.

(3) L. C. van Panhuys: Encyclopædie van Nederlandsch West-Indic, article "Boschnegers," 163

(4) Unsigned article, "Awari-Spel," loc. cit., p. 63.

(5) Ibid.

(6) H. A. Junod: The Life of a South African Tribe (2nd ed.), Vol. 1, pp. 345 ff.

(7) Gerhardt Lindblom: "The Akamba, an ethnological Monograph." Vol. XVII, Archives d'Études orientales, pp. 427-8.

(8) M. Merker: Die Masai, p. 36.

(9) P. Amaury Talbot: Southern Nigeria. Vol. iii, p. 817.

(10) G. F. Bennett: "Wari," Chap. XXXII in R. S. Rattray, Religion and Art in Ashanti, pp. 382 ff.

(11) Op. cit., p. 601.

(12) Dr. Kahn represented the Myron I. Granger Expedition of the American Museum of Natural History, the object of which was to collect ethnographic specimens for that institution.

(13) Koffiekamp is the locale from which the collection studied by G. Lindblom in his admirable monograph, Afrikanische Relikte und Indianische Endehnungen in der Kultur der Buschneger Surinams (Göteborg, 1924), was obtained. He finds that there are many indications of the provenance of the Bush-Negro culture from the Gold Coast area.

MELVILLE J. HERSKOVITS.

REVIEWS.

Rose.

Greece: Mythology.

A Handbook of Greek Mythology. By H. J. Rose, M.A. London: 1928. Svo. pp. x, 363. Price 16s.

A handbook of this kind was much needed. The multiplication of theories as well as the collection of data has gone so far since the last Dictionary of Greek and Roman Mythology was published, that the neat dogmatic entries, like the tickets of a waxwork show, which informed our childhood, are obsolete. Yet the facts, such as they are, remain fundamental, and should be accessible, not to classical scholars only, but to students of other mythologies, which may gain, as much as they have yielded, by comparisons.

The preliminary survey of the history of mythological theories—allegorical, symbolic, rationalist, and so forth—is admirably clear and fair. It is not quite evident, however, how the small-type section (7) is related to the large-type pages which follow it. Should there not be a fresh heading to the latter? In a second edition also, the "additional note" at the end of this chapter deserves expansion, perhaps

even some examples.

To classify a people's myths is not easy; but Professor Rose has contrived a grouping which is simple and remarkably tidy, as the rarity of cross-references and the brevity of minor items in his index shows. "The Beginning of Things" covers the ground of cosmogony; "The Children of Kronos," what the Greeks called theogony, with the important exception of the "Queens of Heaven," separate treatment of whom brings out their essential similarities without enforced comparison. Then come the "Younger Gods," Apollo, Asklepios, Hermes, and the principal intruders into Olympus, Dionysos and Ares; though some might prefer to class the latter pair with the "Lesser and Foreign or alternatively to promote Deitics"; Hephaistos at all events among the "Younger Gods." Another hard case is that of Kybele, so closely akin to Rhea, and Great Mothers outside Asia Minor. The general characterisation of Greek gods,

great and small, on p. 176-7 is rather lost where it stands, and it would not be a serious departure from programme (which rightly keeps mythology distinct from religion and ritual)—to expand it by a paragraph on the relations between gods and the places they haunt, and the men who observe them.

Then come the "Cycles of Saga," where the fruitful observation of Dr. Nilsson, that Greek Saga stands in close relation with Minoan-Mycenean sites, needs to be qualified by a distinction between earlier and later sites: only in Argolis and Attica does folkmemory mount beyond the Third Late Minoan phase of material culture. And more discussion is needed of the genealogical scheme in which the greater part of these incidents are transmitted. The discrepancies in regard to a few wonder-working heroes-Theseus and Herakles, Minos and Kadmos-are exceptional, and result from aggregation of nameless feats around famous names. The normal coherence may either be original (that is, due to continuous folkmemory) or the work of a genealogical editor; but if the latter, what set the editor on this particular scheme, with the Argo's Voyage and the Trojan War contemporary with the 13th-12th century Sea Raids? But this is perhaps rather history, or folklore, than mythology.

This leaves the "Legends of Greek Lands" to be collected topographically, with the result that one of the most important genealogical traditions, that of the Aeolids, is separated from other "Cycles of Saga" and assigned (p. 257) to North Greece; and conversely (p. 261) "the legends of Bocotia have practically all been told" in Dionysiac and other connections, except that of Phaethon, who appears here because that "much married lady," his mother, was a

daughter of Minyas.

Most valuable and suggestive are the chapters on "Märchen in Greece and Italy," with numerical references to the types distinguished by Jacobs, and to parallel stories in Grimm; and on "Italian pseudomythology," with devastating analysis of

the Greek elements in the stories told by Latin authors.

Each chapter has a most useful list of notes and references, conveniently collected at the end, to keep the text undisturbed; there is a serviceable bibliography, and a full index, which gives Greek as well as Latin forms of names, and aids to pronunciations of them. A few misprints may give trouble: Weicker for Welcker (p. 28), Orestos for Orestes (p. 194), now for new (p. 229), and perhaps free fruit for tree fruit (p. 328).

J. L. M.

Folklore: Charms Seligmann. and Amulets.

Die magischen Heil- und Schutzmittel aus der unbelebten Natur, mit besonderer Berücksichtigung der Mittel gegen den bösen Blick: Eine Geschichte des Amulettwesens. By Dr. S. Seligmann. Pp. xii + 309, figures 111. 9\frac{3}{4} \times 6\frac{1}{2} \times in. Strecker & Schröder, Stuttgart, 1927. Price: Paper, 26 reichmarks; Linen, 30 reichmarks.

A Hamburg specialist in diseases of the eyes, the late Dr. Seligmann became interested in the ancient beliefs attributing to eyes the power of influencing, otherwise than as a means of perception, persons, animals, plants, or inanimate objects. An interest in the effects, mainly evil, attributed to the human eye led naturally to one in the means adopted for protection against or cure of such effects; and from these—since the safeguards against the "evil eye" (or its equivalents) are often just those against other specific evils, or against evils in general-to an interest in the many "supernatural," or at least to our minds not strictly logical, ways of combating evils of all kinds. He collected, with typically German thoroughness and industry, everything available to him relating to such matters-not merely from literature and by word-of-mouth, but material objects as well-and his books, Bösen Blick (a large work, in two volumes, published in 1910) and Die Zauberkraft des Auges und das Berufen (Hamburg, 1922) are standard works on the "evil eye" and matters associable therewith. It is tragic that he did not live to see the present study, the logical continuation of his book of 1922, actually published. Fortunately, however, publication had been arranged for and his material prepared, before his death in November, 1926; and it has thus been possible for Dr. Krickeberg, of the Berlin Museum für Völkerkunde, to give the finishing touches and to see the present book through the press.

Only a portion—that concerned with inanimate Nature—of the field surveyed by Dr. Seligmann is here covered. Still

unpublished are his great collections of material concerned with animal and vegetable products (bones, shells, claws, hair, spittle, plants, roots, leaves, seeds, and the like), with manufactured objects (weapons, tools, etc.), with secret or mystical practices (magical gestures, noise, etc.), with the cults of divinities or of other supernatural beings, and with magical formulæ and prayers. The publishers hope that the sales of the present book may be such as to encourage them to issue further volumes containing the whole of these collections. It is strongly to be desired that they may be so encouraged, and that this important mass of material be placed in the hands of students, for-judging by the present group-it should prove a well of information for all engaged in the study of the origin, development, and survival of minor medical and magical practices.

The book opens with a brief description of various kinds of healers, followed by a discussion of methods and means of cure and of protection, of definitions of the terms applied to these, of foreign words and phrases relating to such matters, and of the origin and development of beliefs in charms and amulets. Beyond the portion about a quarter of the book-devoted to these, practically the whole work is descriptive of actual measures, systematically arranged in groups and sub-groups. for combating evils and for curing their effects. There are sections dealing with the uses or the effects of water, of fire (including heat and light, glowing coals, ashes, soot, and fire-steels), of the air and its currents, of earth in its varieties (soil, grave-earth, holy earth, footprints, etc.) and metals (ten elemental ones, alloys, and the modern quack's "electrical" combinations), prehistoric objects and fossils (pp. 181-208), and stones (pp. 208-291). At the end of each section, instead of as footnotes, are given the references to authorities-often surprisingly many-for the statements; and at the end of the volume is a good index. A mine of literary record and reference, the book has very considerable further value to museums and collectors by virtue of its picturing of numerous objects-in 111 figures (mainly from photographs, on 28 plates and in the text), some of which show a large number of amulets, etc., each—including many from the author's own extensive collection. We may well hope that its sale shall encourage the publishers to bring out the remainder of the work, which as a whole should for long be indispensable for all interested-whether as folklorists, ethnologists, psychologists, or students of primitive curative practices—in the matters with which it deals.

Balkans: Ethnography. Durham.

Some Tribal Origins, Laws, and Customs of the Balkans. By M. E.

Durham. London: Allen & Unwin. 1928.

8vo. Pp. 318; plates and illustrations in the text. Price 20s. net.

Under this modest title Miss Durham has set down another instalment of her immense store of knowledge of Albania and Montenegro. Other Balkan peoples come and go in the background-Vlachs, Serbs, Bosnians, Turks; but it is with Albanians that the book mainly deals, and of whom the writer has the most intimate experience. As the preface notes, the Great War so changed the situation even of this secluded corner of Europe, that earlier plans for more systematic exploration have had to be abandoned. But it is with admiration and gratitude that we greet what it has been possible here to set down. Miss Durham was indeed just in time to see old Albanian life as it was, under Turkish rule, which, whatever its defects, did at least provide "cold storage" for many customs and beliefs which have decayed and perished elsewhere.

The book falls into several distinct sections. The first is a kind of gazetteer of the tribal system, as it was in 1913, discussed by regions and groups of tribes, with historical notes, where historical retrospect is possible, and a separate account of that romance, and tragedy, the development of Montenegro into an independent state, and its ultimate fall. Though traces may survive of earlier régimes and distri-butions (p. 14), "the history of the present "tribes is mainly that of the third dis-"placement": namely, by the Turks, in succession to the Serbs and the Romans. "Each tribe has a tale of origin" (p. 15), but the Balkan and European wars interrupted Miss Durham's assiduous collecting, and it is not likely that much more will be rescued now.

Many instances are given of the rigidly patrilineal grouping. "We may be certain "that groups which will not intermarry "have, in truth, a common male ancestor." On the other hand, "Women do not count. "The child, I was told, has none of its "mother's blood," as was argued in the Eumenides on behalf of Orestes; and marriages are permitted or forbidden accordingly.

The second section deals systematically with "Government and Law." It opens with the very interesting suggestion that Strabo's peligones, the office-bearers of Thesprotian and Molossian tribes, may be verbally represented by the tribal elders, plaknit (an old man is plaki), who govern an Albanian tribe. Nothing is more likely, but, as the Serb and Slavonian invaders in the sixth century A.D. were in very

similar tribal society, it would be difficult to distinguish old Illyrian from Slav elements in modern Albanian custom. In the north, all usages are now attributed to the fourteenth century lawgiver Lek Dukagin; but Lek was rather a strict and observant administrator than the creator of a system. He played the part of Draco in Athenian constitutional history, not of Solon. He is credited, for example (p. 67), with insisting on the payment of bloodmoney; but Miss Durham does not make it clear whether this was a substitute for the death of the slayer, or for the devasta tion of his other property "in addition to "the burning of the house," which still remains customary. The modern ritual of appeasement is graphic commentary on the "trial scene" on the Homeric "Shield of Achilles." Other points are raised by comparison of the Canon of Lek with the Codes of Vladika Petar I and Danilo in Montenegro, and of Stefan Dushan in Serbia.

Then comes sections on "Tattooing and "the Symbols Tattooed" which leads straight into discussion of religious antiquities and nature-myths; on "Relation-ships and Blood-Customs," with many grim details, and the life-history of a Montenegrin gendarme, which is one of the best episodes in the book; on "Birth, Marriage, and Death," "Trees and Fruits," "Medicine, Magic and Soothsaying," and some very curious "Balkan Taboos," by no means peculiar to Albania, and all the more interesting on that account. From these titles it will be seen that this is only an instalment from Miss Durham's vast stores of observation; and we may venture to hope that its reception by discerning readers will be such as to encourage her to publish more. At the end there is a valuable list of books on Albania and kindred subjects; and a serviceable index. J. L. M.

Kurdistan.

Empson.

The Cult of the Peacock Angel: a short account of the Yezidi Tribes of Kurdistán. By R. H. W. Empson. With a commentary by Sir Richard Carnac Temple, Bart. 83 × 51, 235 pp., 6 plates. London: H. F. & G. Witherby. 1928.

Mr. Empson gives a very interesting account of the Yezîdis, whom he visited, and discusses their supposed origin, customs, and beliefs. Sir Richard Temple's commentary of 61 pages is mainly concerned with the latter. The total number of the Yezîdis is estimated by the author at not exceeding 40,000, and they seem to have been always oppressed and harried by their more powerful neighbours. As to their origin, there are many conjectures

but nothing certain can be affirmed, as definite anthropological evidence seems to be lacking. Their distinctive customs are largely bound up with their religion, and this appears to be a confused jumble of beliefs in which analysis has professed to discover Zoroastrian, Christian, Muslim, and even more ancient elements derived from the old creeds of Syria and Chaldæa,

all very difficult to unravel.

In Yezîdî belief there is, apparently, a supreme and good God, but he seems to be rather remote and disconnected from the affairs of this world; and there are also minor gods, who are mostly deified saints; but their so-called devils appear to have more practical importance. Sir Richard Temple objects to the title "devil worshippers" as applied to the Yezîdîs (and some other races). In practice, there may well be some difficulty in drawing a hard and fast line between god and devil. It is on record that one of two civilised monotheists, after patiently listening to the other's exposition of his theological views, bluntly remarked: "I perceive, Sir, that your God is my Devil." One of the mainsprings of religion being the fear of various ills, it seems to follow logically that the propitiation of unseen forces which might be harmful is a natural and reasonable prophylactic. The problem of the origin of evil (in the widest sense of that word) has received many different tentative solutions. To an animist it is obvious that good and evil arise from many different sources, a large proportion of which are closely connected with or embodied in various parts of what we should call the material world. A more abstract polytheism may differentiate good from evil deities, and a thorough-going dualism may carry the differentiation still further. But a consistent monotheism, whether primitive (if such there be) or evolved, raises the problem in its acutest form. The power that sends the life-giving rain also wields the deadly lightning flash. It may well be that the unfortunate and tragic history of the Yezîdîs has given a special twist to their religion, and has tended to keep vividly before them the immense power of evil in the world as they know it. It seems, on the whole, not unnatural that the Devil should subtend an unusually large angle in their sphere of vision and should be respected accordingly.

C. O. BLAGDEN.

Cyprus: Archæology. Gjerstad.

Studies on Prehistoric Cyprus. By Einar Gjerstad. Pp. 341. Uppsala, 1926.

All students must be grateful to Dr. Gjerstad both for his own original work

on the field and for gathering together and arranging systematically a mass of very important material much of which was previously very badly published or unpublished. English readers will appreciate his valiant attempt to present the work in our notoriously difficult idiom. Apart from easily interpreted mistakes which demand no apology, they should note that he uses "tholos tomb" to denote a bell-shaped pit-grave entered from above, rather than the built beehive structure to which the term is usually applied in English, German and Greek. Among the new contributions we may draw attention, first, to the houses and fort that the author himself excavated and publishes, thus revealing a hitherto unknown aspect of Cypriote life. The discovery of a camel's skeleton in an Early Bronze Age tomb (69) at Katydhata is also most important in view of the recent discussions of the date at which the beast was introduced into Syria and North Africa.

Dr. Gjerstad's chief achievement, however, is to give greater precision to the tripartite division of the Cypriote bronze age outlined thirty years ago by Myres and Ohnefalsch-Richter; in place thereof he offers us a ninefold division on the plan of Evans's Minoan chronology. This scheme is based, as far as the first two main divisions are concerned, upon ceramic sequences obtained by his own excavations in the island. Tomb groups are adduced to supplement the data thus obtained and to bring within the scheme bronzes and other non-ceramic types. The establishment of the sequence presupposes a minute analysis of the pottery. The main varieties identified by earlier investigators are minutely subdivided. Thus we have four kinds of "red polished ware" and five of "white painted ware," in addition to "white slip ware," It must be confessed that, from the descriptions, it is not easy to distinguish the several varieties from a purely technical standpoint, although differences of shape and ornament are more easily recognised.

There can be no doubt that the new scheme is a great advance and will materially assist further studies. At the same time it must be regarded as provisional and subject to correction in the light of subsequent researches. Too much reliance must not be placed on purely typological considerations. Thus Gjerstad's Early Cypriote I phase should be characterised by the presence of his Red Polished I ware, but actually this is never found apart from Red Polished II, and at Aspraji first appears in the middle strata, while the last-named ware alone occurs lower down.

One is thus left in doubt as to the individuality both of the period and of the fabric that should characterise it. We venture to insist on this provisional character of Dr. Gjerstad's conclusions, not with the idea of disparaging his work, but lest what is intended as a preliminary essay be interpreted by superficial readers as a final chronology of the Cypriote bronze age and all that it contains. V. G. C.

CORRESPONDENCE.

Sociology. Radeliffe-Brown.
Bride-Price, Earnest or Indem-

To the Editor of MAN. 96

Sir,-Mr. Torday (Man, 1929, 3) is seeking some better term than bride-price for such payments as that known as lobola in South Africa. I suppose that everyone who has studied the subject will agree that brideprice, with its definite suggestion of "pur-chase" in our own sense of that word, is not a satisfactory term. Mr. Torday suggests the word " earnest," but in so doing he commits himself and asks us to commit ourselves to, a sociological interpretation with which I. for one, find myself quite unable to agree It is obviously impossible in a note in MAN to discuss a matter which would require a volume to deal adequately with. I can only state my own views on the matter and leave it at that.

Mr. Torday's view is that in the payment of cattle for a wife as practised in South and East Africa "it is the scaling of the contract that is of paramount importance" and it is for this reason that he suggests "earnest" as a term for such payment. With that view I disagree most strongly. In South Africa, for example, the making of a firm contract or union* between the bridgegroom and the bride, and between the two groups that are concerned, involves a number of rites, amongst the most important being a sacrifice and certain exchanges of presents. The payment of the lobola is certainly not by itself sufficient to "seal the contract," and I do not think it really fills that particular function at all.

The payment of cattle for a wife is functionally parallel to the payment of cattle for a man who has been intentionally or accidentally killed. In both cases the payment is an "indemnity" or payment of compensation to a group (family or clan) that loses a member.† Regarding the juridical aspect only (but remembering that these payments have also a ritual or religious aspect) we may say that a family or clan "has possession of" its members.‡ If one is killed the group loses its possession and is damaged in its solidarity and in its rights. In many African tribes, when the damage is due to the action of a person outside the group (even though the

killing be accidental) the group demands and receives compensation or "indemnity" from the responsible person or group. In East Africa the indemnity takes the form of payment of cattle. (In some South African tribes all adult men are in the "possession" of the chief, and indemnity is therefore paid to him and not to the relatives.)

In many forms of marriage a woman passes out of the "possession" of her relatives (family and clan) and into the "possession" of her husband and his relatives. The extent to which this transfer takes place varies in different types of social organisation. It is at a maximum in such strongly patrilineal tribes as the Zulu or the Masai. It is at a minimum in such a tribe as the WaYao, where marriage is matrilineal, but even there the husband, by marriage, acquires rights over the wife, even if only the rights to sexual access and to her services in the household.

Marriage, therefore, in African communities involves an infringement of the rights that a group of relatives or clansmen have over the members of the group, and the primary function of payments of cattle or other forms of wealth is to compensate the group for this infringement of its rights, this invasion, this disruption of its solidarity. The payment is an indemnity in just the same sense as is the blood-price or wer-geld.

Mr. Torday says that "as a rule a woman "does not sever her connection with (her clan) "in marriage." In one sense she still remains a member of her clan. But in those tribes where the payment of marriage indemnity is most highly organised, i.e., in the cattle-keeping peoples of South and East Africa, the woman does pass out of the possession of her clan. She goes to live with her husband's people; the food she produces is consumed in his group; the children she bears become members of his group and not of hers. When, therefore, Mr. Torday says, "We may disregard the loss to the clan," he is proposing to disregard what I very definitely believe to be the most important thing of all.

All that I have said here applies only to one-sided payments—by the group that receives a woman. Exchanges of presents, such as occur in connection with marriage in Africa and elsewhere, are a different matter.

* A marriage is not a contract, though a promise to marry may be. A marriage is a union, and, at any rate for the woman, involves a change in status.

involves a change in status.

† "Indemnity" here is used in the sense of any payment which absolves from an act that constitutes an infringement of rights.

‡ It is not possible in a short space to discuss the meaning that is here attached to the word "possession." I use the term in a very wide sense, in which it can be applied to material things, to persons, and also to immaterial things such as a name, a rank in society, etc. It implies that the thing or person possessed by an individual or group has a specific value and is therefore the object of a sentiment of attachment for the individual or group, and it also implies the existence of certain rights over the thing possessed on the part of the possessor or possessors.

Further, when I suggest instead of "brideprice," with its suggestion of a relation that is primarily economic, the term "indemnity," which regards the transaction as being rather a juridical one, I would point out that such payments, whether at marriage or for homicide, have a definite economic aspect, a juridical aspect, and, in addition, a ritual or religious aspect. Each member of the group is one of its "sacred" possessions. In South and East Africa cattle are very definitely sacred. The payment of cattle for a wife (and her future offspring) is therefore an exchange of sacra. The custom of uku-lobola certainly cannot be properly understood unless this religious aspect, which intimately relates it to the ancestor cult, is also considered. So that "indemnity," while better than "price," is still not entirely satisfactory. But "indemnity" and not "earnest" is what in one aspect, and a quite important aspect, the payment really is.

The exchange of social values, material or

inmaterial, may take many different forms and fulfil many different functions. The purely economic purchase and sale of our own culture is hardly developed at all in many of the simpler cultures. Only when we have made a very extensive analysis and classification of all varieties of exchange or payment shall we be able to create a really scientific terminology. Meanwhile, I believe that the lobola of the Zulu, or the bohadi of the Basuto, is much more accurately described as an "indemnity" than as an "earnest."

Yours faithfully, A. R. RADCLIFFE-BROWN

Caton-Thompson. Egypt: Archæology.

To the Editor of MAN.

SIR,-It is with much gratification that I read the most valuable contribution from Dr. Sandford and Mr. Arkell of results obtained in the Fayum, and their interpretation of the data there collected.

It was in the hope of eliciting some such needed statement from them that Miss Gardner and I, in our joint paper in the Geographical Journal of January last on Lake Moeris, inserted several paragraphs not strictly relevant to our main theme.

Messrs. Sandford and Arkell are prepared, it seems, on their evidence to place the sequence of palæolithic events in the Fayum in post-Mousterian times, a culture-cycle and geological stage later than we have considered to be warranted on our own observations. They agree with us in attributing a Mousterian age for the 270-260 ft. lake level (about 112 ft. above sea level); an identification we published in the J.R.A.I. and elsewhere two years before Messrs. Sandford and Arkell's survey began.

We appear to part company in our interpretation of succeeding events up to the advent of Neolithic times.

To us the main difficulty in following Messrs. Sandford and Arkell's sequence lies, of course, in the fact that an industry indistinguishable from the typical Mousterian of the 270 ft. (above lake) beach, is abundantly found in association with Fayum beaches considerably below sea level—about 140 ft. lower than the higher Mousterian shore-line we are all agreed upon.

No reference to this fact, or provision for it. seems to be made by Messrs, Sandford and Arkell. But it is crucial in the sequence of

events.

Yours, etc.,

G. CATON-THOMPSON.

British Association Archeological Expedition, Zimbabwe, Southern Rhodesia, May 12th, 1929.

ANTHROPOLOGICAL NOTE.

Indian Pottery and Beads.—The India Section of the R.A.I. have undertaken the compilation of: (A) Corpus of Pottery - a card-index of Indian cairn and urn-burial pottery forms; (B) Corpus of Beads—a type-collection of Indian beads. Cards have been prepared with instructions for filling them up, and assistance is sought from workers in the field and others who have access to collections in museums in India. The work requires no previous experience or great ability of draughtsmanship, and is of the greatest importance. No corpus of Indian pottery of any kind is at present in existence, a fact which must militate against the solution of the new problems of the Indus valley

The research-committees of the India Section are already dealing with three im-portant collections of beads from known sites. It is felt that a type-collection would be of use to scholars in England, and it is therefore proposed to ask for types of beads, if possible from known sites, to be sent to the secretary of the section. Only two or three beads of one kind are wanted. They should be strung on thread and a written description of the site on which they were found or the manner in which they were acquired should be included The collection so formed will be housed at the R.A.I. and will be accessible to students. If it is desired beads that are already represented in the collection will be returned to their owners. In certain cases beads of which the provenance is not exactly known may prove of interest. It is hoped that museums and other bodies in India who have bead collections will co-operate with the Institute by contributing duplicates.

The Secretary of the India section, R.A.I., 52, Upper Bedford Place, W., will be pleased to send Pottery Index cards and instructions to anyone interested. There is a certain amount of pottery in the London museums, in the Indian Institute, Oxford, and in Berlin (Jagor collection) which remains unrecorded.



FIG. 2,-THE SHEELA-NA-GIG AT ONFORD,

Fig. 1,—-THE SHEELA-NA-GIG AT HEXHAM, FERTILITY FIGURES,

ORIGINAL ARTICLES. With Plate H.

Britain: Religion.

Murray: Martin

There is very little written on the traces of fertility worship in Christian churches, the most important book on the subject being, perhaps, Witkowski's "L'Art profane à l'église," which devotes a few pages to the Sheela-na-gig, though without any scientific intention. The dating of such figures is at present very vague, and it is with the hope of contributing to such dating that I publish the figure, Pl. H, Fig. 1, from the Priory Church of Hexham.

The figure is on the north face of the north side of the screen of the chantry of Prior Rowland Leschman: the rest of the screen and the tomb itself are either

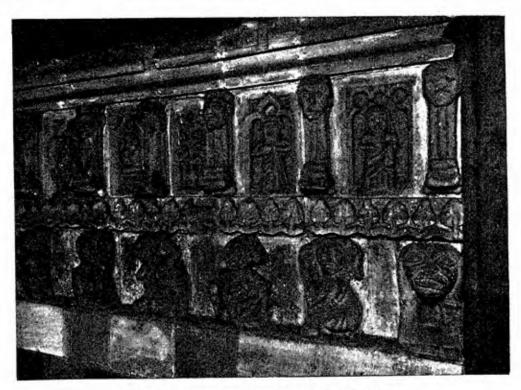


FIG. 1 .- SCULPTURE, PRIORY CHURCH, HEXHAM.

plain or are ornamented with arcading. It seems, therefore, that the position of the sculptures has a definite meaning. Though there is a fairly large literature on the Priory Church, the chantry of Prior Leschman has never been properly published and very little is known about it. The date is from 1480 to 1491, and there is no reason to suppose that the sculptures are not contemporary.

The figure is in the centre of the lower row of sculptures. It represents a three-headed phallic personage with hairy legs, riding on a creature with cloven feet, lion's ears, human features, and a large protruding tongue. The three heads represent: on the right, a rounded fat face with the mouth slightly open; in the middle, a formidable person, with drooping corners to the mouth (the nose is rather damaged); on the left, a fleshless skull.

Fig. 1 shows the position of this composite figure among the other sculptures. Taking them from right to left the figures are: (1) a human head; (2) a woman (?) spreading out her hair; (3) a contortionist; (4) a sleeping man, his arms clasped round his neck and his head at right angles to his body; (5) the three-headed personage; (6) a seated man playing a harp; (7) a bear on its hind legs holding its front paws over four birds; (8) a man playing the bagpipes or flute; (9) the head and paws of a couchant lion. There are eight panels in the upper row, divided by pilasters surmounted by human heads. Two of the panels contain interlaced designs, perhaps in allusion to the name Leschman, i.e., weaver; two have saintly personages; one has a vase of lilies; one, a bear seated; one, a knight on horseback, killing a dragon; and one has a representation of a phallic figure, crowned, holding a sceptre across his body, and either running or dancing.

The actual meaning of these figures is still obscure, but I am inclined to see in them the remains of that ancient worship which was too strongly rooted among the people to be destroyed by Christianity, and whose emblems survived even in the sacred places of the new religion.

M. A. MURRAY.

The Sheela-na-gig at Oxford. By R. R. Martin. With Plate H, Fig. 2.

At the Church of St. Michael-at-the-North-Gate, Oxford, on the west side of the Tower which overlooks Cornmarket Street, and to which the ancient North Gate was connected, there was inserted in the surface of the Tower, on the level of the third floor, a stone, some 12 inches square by 5 inches deep, which is



FIG. 1 .- SHEELA-NA-GIG, ST. MICHAEL'S, OXFORD.

hollowed out to form in relief the rudely carved figure of a woman of the kind known in Ireland as Sheela-na-gig (Pl. H, Fig. 2). This has recently been removed for examination and it has been found that the action of the smoke of the city has been so deleterious to the carving that it is now to be preserved in the Church.

MAN.

There is no known record whatever of the figure, or of its position in the Tower, where it was not very noticeable owing to its height, which would have been above the roof of the old Bocardo Prison, over the gate, which adjoined the Tower. The age of the Tower itself is disputed, since it has many obvious Saxon tracese.g., the mid-wall shafts shown in the photograph of the window-but is also very similar to the Tower of St. George at Oxford, which was built by Robert d'Oigli in 1071. The figure is possibly of great antiquity, though no historical record of the existence of any settlement at Oxford is known before the eighth century.

R. R. MARTIN.

Anthropology, Physical.

Keith.

The Alleged Discovery of an Anthropoid Ape in South America.

By Sir Arthur Keith, F.R.S.

Let me say at once that on the evidence submitted regarding the nature of Ameranthropoides loysi—the alleged anthropoid of South America—it is only possible for those familiar with the anatomy of apes to come to one conclusion, namely: that a mistake has been made and that the animal in question belongs to the genus Ateles; in brief, it is a spider monkey—whether of a known species we cannot say, owing to a lack of evidence.

Four communications have been published concerning its characters and nature: (1) A statement prepared by Dr. George Montandon and communicated to the Academy of Science, Paris, by M. Bouvier on March 11, 1929 (C. R. de la Acad. des Sc. 1929, t. 188, p. 815. (2) A brief note by Dr. Montandon which was published in Revue Scientifique, 1929, t. 67, p. 269. (3) A critique of the discovery by Professor Joleaud of the Sorbonne (ibid., p. 269). (4) An article in the Illustrated London News, June 15, 1929, p. 1040, written by the discoverer-

Dr. Francis de Loys, B.Sc., D.Sc., F.G.S., a geologist of Lausanne.

From these various sources we learn that the discovery was made fully ten years ago-between 1917-1920-when Dr. de Loys was travelling in jungle country on the west of Venezuela-almost on the frontier of Colombia. He and his company rested one day on the bank of a stream when the breaking of branches made them peer into the jungle. Two animals, which were mistaken at first for bears, advanced, arming themselves with branches and, I am sorry to relate, behaving shamelessly, for they defaecated into their hands as they advanced and threw their excrement at the invaders ("excrementant enfin dans leurs mains et " jetant ces excrement contre les hommes"). Thus attacked, the party flew to their guns, with the result that one animal was shot-said to be a female-and one escaped-said to be a male. That was all that was seen of this new species of anthropoid in a live condition-a momentary encounter.

Dr. de Loys apparently made no notes at the time of the characters of the animal which was shot; his recollection is that the hair of the animal was thick, coarse, long and of a greyish-brown colour. He told Dr. Montandon that he measured the stature and found it to be 4 feet 5 inches, English measurement, which is 134.6 ctm., but in his own published account Dr. de Loys gives the stature "from sole of the feet to apex of the skull" as 157.0 ctm.-so that the animal apparently grew 23 ctm.—over 9 inches—after the original measurement was made. He also states in his own account that "the jaw, carefully examined, revealed "the presence of 32 teeth only," and although no mention is made of the characters of these teeth, the further statement is volunteered that "on the back " part of the mandible there were not any protuberances hinting at the " possibility of a greater number of molar-teeth"—the latter statement making experts suspect that Dr. de Loys's knowledge of teeth is not deep. Further, Dr. de Loys simply mentions—as if it were a matter which required nothing more

than mention-that the tail was completely absent.

A photograph of the animal from behind would have clinched matters, but the only photograph taken was one of the front—the animal being placed in a sitting position on a box of unknown size and with no standard object in or near the body of the animal to give a clue to the dimensions of its parts. The problem of identification is further complicated by the discoverer, who has, after removing skin and skull, lost them; his party met with hardships and had to abandon them. Thus the only original document at the disposal of zoologists who seek to identify the kind of ape shot by Dr. de Loys—some ten years ago—is the photograph on which Dr. Montandon's description is based and which is reproduced in the Revue Scientifique and in the Illustrated London News.

Professor Joleaud has made a minute examination of the characters exhibited by this photograph and recognises in it all the features which are associated with spider monkeys, but—instead of drawing the logical conclusion that the "new "anthropoid" is a spider monkey—accepts Dr. Montandon's diagnosis because of the alleged size of the animal and because in shape of body and of limb it shows certain resemblances to the gibbon and orang. He forgets that in all these respects the new ape resembles spider monkeys more than it does either the gibbon

or orang.

Now all the characters of the nose, mouth, eyes, orbits, skull and scalp—the form of body and proportion of limbs—so far as can be judged from the photograph—are those of a spider monkey; the animal is alleged to have the large clitoris of spider monkeys; Venezuela is the home of one of the larger spider monkeys. The hand and foot are those of a spider monkey. Dr. de Loys asserts that it is a ground-living form; the hands and feet, as shown in the photograph, are shaped as in purely arboreal apes. Clearly Dr. Montandon has himself a suspicion of the truth, for in the final paragraph of his original communication he makes the following observation: "Reservant la possibilité que nous nous trouvions en présence d'une "nouvelle espèce do genre Ateles, nouvelle espèce geante."

Nevertheless Dr. Montandon goes on to name the animal, not Ateles loysi, but Ameranthropoides loysi. He would have shown greater zoological acumen if he had stuck by his reservation. Thus we fear that the latest discovery, which ascribes to South America a higher or anthropoid kind of ape, is doomed to go the way of so many others which have been announced from that continent. Since the beginning of the present century there have been many alleged discoveries of human ancestors, but all of them have proved to be other than what they were originally supposed to be.

ARTHUR KEITH.

India: Technology.

Codrington.

A Note on the Pottery of Bhita, United Provinces, India. By 101

The Archæological Survey of India have carried on extensive excavations at Bhita, an ancient site near Allahabad. In the Survey Report [1911–1912] on the evidence of seals and terra-cottas, and a limited number of coin finds, the site is dissected into "Primitive," "Mauryan, Sunga, Andhra," "Kushan," "Gupta," "Late Gupta" and "Medieval." A glance at the description of the wares makes it plain that the evasive classification of "Primitive" amounts to nothing more or less than "Pre-Mauryan." Also it must be explained that no distinction is made in the Report between "Mauryan," "Sunga" and "Andhra," all three titles attached collectively to a single group of finds.

The "Primitive" pottery is wheel-turned and of a dark grey fabric, usually covered with what is described as "a black, mucilaginous paint or glaze which

"gives them a metallic lustre almost like polished steel." Occasionally it is blotched or streaked with red. In addition to this grey ware, "common red or brown ware" is said to exist, but is allowed to be "indistinguishable from the ware of later date." Among the shapes are an open bowl with a double-moulding round the rim, another somewhat more curvilinear, a series of flat-bottomed cups, flaring outwards, and various small flat-bottomed jars.

On turning to the pots collectively labelled "Mauryan-Sunga-Andhra," that is to say, fourth century B.C. to first century A.D., one is surprised to find that the distinctive grey, metallic ware mentioned above persists in this period, though, it is said, in smaller quantities. This, it must be admitted, removes the only reported distinction between the so-called "Primitive" and the so-called "Mauryan-Sunga-Andhra," as far as the ware is concerned. During the latter period buff clay with a red slip is said to be common, and also white coarse clay sprinkled with mica, pink clay with what is called "a thin wash," grey clay with what is called "red paint," and buff clay also with "red paint." Here it is probable that "slip" and "wash" are synonymous and that the reported "painted" wares are simply polished. The position is further complicated, however, when one finds all three of these terms applied to wares classified as "Primitive" in the itemised list, but not mentioned in the text. An examination of forms in the light of this strange lack of differentiation in ware will show that there is an equal lack of distinction. No. 13, called "Primitive," is of "buff-red clay with a thin wash"; No. 24, called "Mauryan," is of "buff clay with a red slip"; the first is 34 ins. high, the second 33 ins. and the form is identical. Furthermore, tray-like bowls occur in both classes, as do little conical cups.

It has been said already that the dating of the site given in the Report is dependent upon finds of seals and terra-cottas. The script of the seals is admittedly early and certain of the figurines look most primitive. On the other hand, the palæographical evidence of clay seals is difficult to evaluate, and among the terra-cottas called "Primitive" there are many that are definitely comparable with the sculpture of Barhut and Sanchi [second-first century B.C.]. There does not seem to be any evidence for a division of the bottom strata at Bhita into two periods or for dating them earlier than second century B.C.

The title of Kushan for the next period at Bhita has the warrant of a limited number of coin finds. The value of coins as evidence of date in India is qualified by certain extraordinary aberrations. Certain coinages seem to have acquired a long period of circulation by sheer popularity, added to which the practice of hoarding makes wear of little value as evidence of length of circulation. In these strata the pottery is of "common" buff-coloured clay, coarse grey clay, grey clay with a grey wash, buff clay with an admixture of mica and, most frequently of all, buff clay with red "slip," "wash" or "paint," whatever that is. At the head of the list of finds mention is made of "one or two specimens covered with glaze." These are Nos. 68 and 69. No. 68 consists of two fragments described as of "reddish clay with black glaze inside and out"; No. 69 is described as "same sort of clay, same sort of paint." There is no reason to believe that vitreous glaze is intended.

This group of pottery is certainly different from the last, but it has remarkable likenesses both as to ware and form with the three periods that are said to succeed it, according to the classification of the Report. No. 53, said to be Kushan, is a spouted jar of buff-clay mixed with mica. No. 93 is also a spouted jar of buff-clay mixed with mica and it is said to be late Gupta, that is to say, sixth or seventh century.

It seems evident that, at Bhita, occupation during two distinct periods has occurred with a lapse of some centuries in between. This is typical of Indian city-sites which are fungoid in growth, exhausting the soil they cover, but returning to it after a period.

K. de B. CODRINGTON.

Philosophy.

Hocart.

Modern Critique. By A. M. Hocart.

In a very sound article on "Patricians and Plebeians at Rome," in the Journal of Roman Studies for 1926, p. 106, Prof. H. J. Rose makes a statement which sums up Modern Critique so well as to form a very convenient text on which to base a critique of that critique. He says, "In the matter of the origin "of the plebs we have to handle Livy or Dionysios as we do Niebuhr or Binder; "as theorists, that is, who must bring forward facts to prove their theories" (p. 118).

The premise, that Livy and Dionysios are theorists is unimpeachable; but I demur at the conclusion that they are to be treated just like Niebuhr and Binder, for, beyond being theorists, the two pairs have nothing in common. Livy was heir to a continuous Roman tradition; Niebuhr belongs to an entirely different lineage, to a small degree Roman, but largely Oriental, Keltic, Germanic, the whole very much transformed by centuries of development culminating in the destructive

rationalism of the eighteenth century.

A theorist is the child of his own times, or rather a brother of his own, and the child of former ones. His theories may differ from those of his forefathers, but they have gradually developed out of them. Niebuhr and modern critique developed out of the eighteenth century and therefore their theories conform to the canons of Pure Reason, approve of what seems rational to a nineteenth-century European, and reject what does not. Their theories are, therefore, very good evidence for the state of mind of the nineteenth century, but not for the manners and customs of ancient Rome. Livy, on the other hand, was saturated with the traditions of earlier generations, which themselves derived their traditions from earlier ones and so on to the source. When he theorised, therefore, he was bound to theorise along traditional lines, to imagine such motives as impelled his own contemporaries, or such as he was accustomed to hear impelled his ancestors.

Let me illustrate my meaning by an example taken from actual experience. There is in the island of Lakemba in Fiji a large cave. There are no traditions of any kind about it; but just out of curiosity to see what he would make of it, I asked Master Tarongi how this cave had been formed. He thought a moment, then answered, "Maybe the ancestor-god shaped it." That was just his theory, and was put forward as such; but shall we say that his theory is of no more value to the historian than one I might conceive? Obviously no, because my theory would be framed on the analogy of theories current in the Europe of my own time: it would talk of erosion, disintegration, and so forth; in default of other evidence a historian two thousand years hence could use it to reconstruct the geological theories of the twentieth century, but it would tell him nothing about Fijian history. Master Tarongi, on the contrary, drew upon ideas of causation which he had imbibed from his elders: over and over again he had heard natural features ascribed to the actions of some ancestor-god; when asked to produce a theory where none existed he applied the teachings of his forbears as automatically as I should apply the lessons of geological manuals. His theory, then, illustrates the beliefs of his people not only in the twentieth century, but for many generations earlier. The only question is, how many generations? The same type of legend prevails in the Solomon Islands, Ceylon, Northern India, and many other parts,(1) so that it must go back such a distance in time as to make the interval between Livy and Romulus dwindle into insignificance.

It so happens that we have a considerable collection of legends such as served as model for Master Tarongi, so that we can dispense with the copy. (2) This is only of interest as an example of formation by analogy, a process familiar to comparative philologists, and destined to become equally familiar to anthropologists when

they cease to study processes in an imaginary being called primitive man, and turn their attention to the real men around them.

There is, near Kandy, in Ceylon, a square temple of stone with a pyramidal roof and surrounded by a wall pierced with trefoil windows. An enthusiastic amateur, widely read in European archæology, writes that a priest has begun to roof over the space between the shrine and the outer wall. Vandalism! The plan is examined and turns out to be that of numerous Kandyan temples of wattle and daub: square sanctuary surrounded by an outer wall supporting a roof so as to form a covered deambulatory. The top of the wall is examined and traces of the insertion of a roof are found. The priest was right. He was only a theorist like the amateur, for he had never seen that temple in its original shape, and no one had, since it was built some centuries ago; but whereas the amateur approached the architecture from the outside, and thus failed to grasp the essentials in the midst of unessential peculiarities, the priest approached it from inside tradition; he had his ideas moulded by little modern village shrines and, even more, by habits of worship which demanded certain features. He did not reason things out, but just had a feel for the right thing, and

an ounce of that feel is worth tons of critique.

When, therefore, Sinhalese villagers tell us that it was King Mahasammata who ordained that the men of the drummer caste should carry out the propitiation of planets, we shall realise that they are theorising, but at the same time we shall not treat their theory exactly as we should treat those of Senart and Risley, because the Sinhalese have inherited their theories in an unbroken line from the facts, whereas Messrs. Senart and Risley are not the heirs of tradition. The first thing we have to settle is, how old this theory is? Mahasammata is well known in Buddhist literature: he is the original ancestor of the solar line. Yet, so far, neither inquiries from the learned nor a search among indexes have produced any confirmation. Even so I still put my faith in the villager. Literature is only a fragment of what has been and it is largely accident whether it preserves a fact or not. However, let us suppose that this is purely a local theory: it must have been framed on the analogy of earlier ones, and those on the analogy of still earlier ones. We can be sure that those early ones have not left just one derivative in an obscure corner of the Ceylon jungle: we must seek elsewhere. The result of a search through Brahmanical literature, inscriptions, caste legends, modern custom, is to reveal the king as the head of the caste system with the power to promote and degrade, award titles and privileges.(3) Thus the theory of the villagers is not so far removed from the truth: it is merely a distortion of it. There is no reason to doubt the existence of Mahasammata; and if he existed he must have been the fountain of honour, assigned new privileges, extended or restricted duties. The distortion consists in making him appear as the inventor, instead of regulator or administrator. It is as if, having lost all records previous to 1900, we mistook the birthday honours list of that year for the first institution of the peerage.

Having gained our experience among the living, we can now apply it to the dead. Dionysios (II, 8) says, "Romulus, when he had marked off the better people from " the inferior, next decreed and defined what each should engage in, the well-born " to sacrifice, and rule, and judge, and with him administer the state, confining " themselves to the affairs of the city; the plebeians to be released from these duties, " neither having any experience of them, nor, on account of their poverty, any leisure, " and to cultivate and breed cattle and practise money-earning crafts." Plutarch concurs and also ascribes to Romulus the institution of patrons and clients (Romulus, 13). Fustel de Coulanges, who generally defends tradition, deserts it here. He argues that the institution of clients must be much older than Rome, since it existed in other Italian cities; and his argument is unanswerable. Yet, even so, I would back the opinion of Dionysios and Plutarch against Pauly-Wissowa and the most

up-to-date critical historians. After all, De Coulanges's argument applies no less to Dionysios's theory than to the clientship: whenever the Greeks or Romans (to say nothing of the Indians) speculated on the origin of grades of society they invariably concluded that it was the work of some king or sage. Therefore the theory is vastly older than Dionysios, in fact than Rome itself. It had evidently become a habit of thought over a large area of the world, and there could not be so much smoke without a fire. I think we have already discovered that fire in India: early kings are law-givers rather than administrators; they merely expound the law, which is in society the counterpart of order in nature; he upholds the constitution; but for Greeks, Romans, Indians, the constitution is the division into classes, and the apportionment to each of proper rights and duties. When we establish a new colony the first thing we do is to frame a constitution of which the Governor is considered the author, although he may merely be approving of what his coadjutors have copied from other constitutions. I see no reason to doubt, and every reason to believe, that when Rome was founded the king promulgated the laws he proposed to rule by, laws which from ancient times had been considered necessary to the prosperity of every state.(4) It is not suggested that he arbitrarily classified the people according to his own will: the greatest potentate cannot ignore existing class distinctions; but men are perpetually organising and reorganising, and for the ancients any organisation involved castes or classes. The kings of Rome certainly had the power to adjust the classes and to promote or reduce within the system, since we find that prerogative was exercised by the elder Tarquin, on a very large scale by Servius Tullius, and finally descended to the censors. The story of Marcus Livius and Caius Claudius shows that in theory the discretion was absolute, though in practice it was expected to be tempered by custom, good sense, and public opinion, like the king's power of creating peers, or any prerogative not bounded in theory.(5)

Thus Dionysios is right after all, except in one particular: he may have mistaken the first exercise of the prerogative for its first institution. (6) Is it quite certain, though, that he did? When a modern historian says that Tsar Nicholas II gave Russia a constitution he does not mean that Nicholas invented constitutional government, parliament, the peerage; nor does the statement that Wolsey framed statutes for Christ Church, Oxford, and established studentships, necessarily imply that he invented the collegiate system. The ancients were perfectly well aware that the clientship existed in other cities besides Rome. Plutarch recognised that it was older than Rome, since he mentions a theory that it was derived from one Patronus, who came with Evander. The ancients were, besides, undoubting diffusionists, and if they found the same institutions in two places did not talk of its being natural or invoke the uniformity of the human mind, but concluded that one had borrowed from the other. Lykurgus was credited, rightly or wrongly, with the whole constitution of Sparta, yet at the same time he was supposed to have borrowed the main features from Crete.

Whatever may have been in Dionysios's mind, he has preserved for us a valuable piece of information concerning the constitutional powers of kings, powers which go back to a very remote antiquity and which play a great part in the history of human society, but which we shall search for in vain through the pages of the critical school.

Dionysios does more than that: he definitely disproves the racial theory which Prof. Rose has laboriously demolished. For him the division into patricians and plebeians was the result of social organisation (we may add, for our part, along traditional lines), not of conquest. Diversity of origin is, in my experience, one of the most tenacious memories a people can have. If foreigners come and settle, whether peacefully or by conquest, among another people, they will remember that, if nothing else. Even decayed rustics living a precarious existence on the edge of the jungle remember that, long ago, the people of the next hamlet came from overseas

under seven princes; yet all difference of custom and language has vanished! We may be quite certain that if the Romans did not believe the patricians and plebeians to be distinct peoples it was because they were not, and it should take a great deal more than facile theories of race fusion to shake us in that faith.

The fundamental vice of the critical school is that it assumes traditions to be wrong until they can prove themselves right. To Mommsen they are mere "romances "dressed up as history," so he dismisses them without even giving them a chance of establishing their innocence. That is not the attitude of the wise judge.

There are countries where false evidence is the order of the day; where even a man with a good case will lie to make it better. Yet even in such countries the judge does not set aside the evidence and evolve the facts out of his own brain. No, he listens patiently to the whole farrago, knowing it to contain lies, but knowing also that even lies are based upon facts. He hopes by the application of commonsense to eliminate inventions, leaving only the truth. Thus a man brings a charge against his mistress of having absconded with property belonging to him. This is a possible charge, but experience warns that it is probably a false one, designed in revenge for her running away. Let us, however, not pre-judge the case; and, since he is our only witness, how are we to get at the truth except with his aid? His statement is noted and an inventory taken of the articles alleged to have been stolen: it includes a woman's bodice, clearly not his property, but a gift made by him to her, and which he is spited at having bestowed in vain. Thus the evidence contains its own correction, a very small one; for the whole story is true except for the omission of one small, but vital, fact—namely, that the articles had been given.

If a man cannot get away from the facts when he is trying his best, how much harder must it be when he is cleaving to them with all his might! Are we not at least as safe as our judge in accepting the evidence and using it to correct itself? The plain man trusts his senses, and, when he finds them at fault, uses them to correct their own errors; it is only the philosopher who rejects them altogether on account of some manifest failures, and proceeds to construct a universe out of his imagination. So also the critical historian, having caught out tradition once or twice, sweeps the whole away and proceeds to fill the vacant space with what he himself thinks self-evident, but what succeeding generations will recognise as the prejudices of his time. Grote thought he was reducing Greek history to reason: we now see that he was reading Victorian liberalism into Athenian politics. Yet Grote was moderation itself compared with the destructive activities of later generations whose excesses in reversing anything the ancients had declared are already bringing about a reaction. Already I hear Sir Flinders Petrie rejoicing that "the passion " for denial which reigned from Niebuhr to Cheyne has had a salutary check in " many countries."(7)

It is when a people's habits of thought are remotest from ours that we should treat them most tenderly, yet it is precisely then that modern critique becomes most high-handed: whole aspects of thought are liable to be ignored or denied simply because they do not square with European rationalism. In vain pundit after pundit comes forth and states in no equivocal language that the Indian king is a god, or even several gods; the European scholar will not accept their assurance; these statements, he explains, do "not imply any divinity of the king, but merely that he "is as much superior to the lower caste as the gods are to mankind." (8) Why cannot the Indian mean what he says? (9) One suspects that the true reason is that such a doctrine sounds like blasphemy to unaccustomed ears.

Even the sounder and more moderate among those bred in the critical school allow Prejudice to creep in under the guise of Reason. (Who of us has no prejudices?) Thus when Sophocles's Antigone argues that a brother is more precious than husband or children, because she can beget more children, but not another brother, our

taste is naturally shocked. Admirers of Sophocles cannot bring themselves to believe that so perfect a dramatist could have suffered such a lapse, and the blame is laid on some argumentative and tasteless copyist. It has, however, since been discovered that the argument was a tragic dilemma which has appealed to more than one age and people. It is the theme of song in the modern Balkans; it is related with admiration in a Buddhist story which is doubtless pre-Buddhistic. 10 It is obvious that it made a very wide appeal to the ancient world, and a dramatist working it into his tragedy would be renewing old feelings. Perhaps Sophocles did not work it into his tragedy, but found it already worked in. Anyhow, does it really matter whether he wrote it or not? He who reads him as literature can bracket the passage and skip it when he gets there; but the historian of civilisation will be thankful that some one put it there. Modern Critique has wasted on questions of authenticity which are quite immaterial much time which it could more wisely have spent on extending its knowledge; for one of its great weaknesses was that it thought it knew a great deal more than it did; it had no conception how scrappy its information was. There is a story of a German professor who emended milch-cow to milk cow, because, he argued, there was no such word as milch in English. We may smile at him; but might not the Romans of the monarchy laugh at Prof. Beloch when he argues that the names of four kings are plebeian and therefore the lists of kings are not trustworthy? Would it not be wiser to recognise that we do not know everything, and that if we knew more we should see an excellent reason for these plebeian names. Even in our present state of knowledge it is not difficult to imagine one. May not some of the kings have been plebeians? There were low-caste kings in India from early times, why not in Rome? As a matter of fact Ceylon presents us with an exact parallel: it has recently come out that the names of some of the early kings belong to the trid, or agricultural caste, not to the first, or royal; only in this case we have, besides, a legend that the first king of Ceylon was of the third caste. Though our use of the word "tyrant" may disguise the fact, democratic kings were succeeded in Corinth by an oligarchy of the royal caste.

There was some excuse for the presumption of Modern Critique when it began its career: its adherents had no knowledge of human ways and thought outside their own circle, the cultivated middle class of Europe. Since then anthropology has extended our knowledge so fast that historical thought has not been able to keep pace with it; but we are beginning to realise that there are more ways in which man can act and think than was ever dreamt of in the philosophy of Niebuhr or even of Mommsen; that things which seemed fabulous to them do actually happen. Thus a little knowledge leads away from tradition, but much knowledge brings back to it, and we have to thank Prof. Rose for helping to bring back to it, and for placing

our widened experience at the disposal of Greek and Latin scholars.

It is not, however, only the knowledge that Modern Critique lacks, but also the faculty for entering into the point of view of other ages and other races, of adopting their premises and reasoning from them, for to do so requires a constructive mind, and critique is destructive. Hence the failure to do what, in retrospect, often seems to be merely putting two and two together. Thus Muir put the student of civilisation under great obligation by assiduously collecting ancient Indian traditions as to the origin of caste, but, though his subsonsciousness evidently felt such texts worth collecting, yet his reason found them so contradictory that he rejected them as untrustworthy. One set of traditions derived the castes from the various members of a god, while others traced the various castes to the sons of the same father, not always the same man. How could both be true? This verdict does not seem to have ever been called in question, and no one seems to have attempted to take these traditions seriously. Muir, like every Sanskrit scholar, was well aware that, according to Indian thought, the members of the higher castes are born twice—first, after the

flesh from his father and mother; a second time, by initiation from the Vedas: but he never entered sufficiently into the spirit of such a creed to argue from it and to conclude that castes have a double origin, temporal and spiritual, that there is no more contradiction in saying that the Sunaka Brahmans are descended from Sunaka and that Brahmans generally are born from Purusha's head, than there is in saying that John Smith is the son of George Smith and yet, as a baptised Christian, is the child of God, born as a member of Christ.(11)

Sometimes the contradiction lies, not in the facts recorded, but in the use made of them. Thus Plutarch gives three alternative theories of the word "patrician:" (1) because they were fathers of legitimate sons; (2) because they knew their own fathers; (3) on account of the patronate. If any one of these etymologies is true, the other two cannot be; but the actual facts may all three perfectly well be true. Comparative evidence suggests (it is as yet no more than a suggestion) that the "fathers" were the heads of noble families, men who had gone through the sacred marriage rite which is at the same time an installation in a higher rank(12), and thus begot children qualified to carry on the sacred rites and who carefully kept their pedigrees in support of the claim; moreover they stood in a relation analogous to that of father towards the family serfs.(13) Thus the three rival theories preserve three facts that are mutually complementary, and only become conflicting when used for the same etymology. It will generally be found that when men want a theory they draw from facts.

Thus I believe that as our knowledge extends beyond the limits of one people to as much of the world as our minds can embrace many problems will solve themselves which critique can never solve.

A. M. HOCART.

REFERENCES.

(1) "The Cult of the Dead in Eddystone Island." Journ. Roy. Anth. Inst., LIII. 1922. Pp. 272 ff.—Ceylon Journal of Science, sec. G. Vol. I. P. 60.
(2) See my "Kingship." Pp. 182, 233.

- (3) I hope to give the full details of these researches elsewhere.
- (4) Mommsen scornfully remarks that Rome was not built in one day. Tradition never said it was: it said it was founded in a day or whatever it was. To found a city is to consecrate the site (PLUT.: "Romulus" 12). That can be done in one day, though I think that comparative evidence will some day show that at one time seven days was the proper period.

(5) Livy: I. 35, 6; 42; XXIX. 37, 8.

(6) Mcdern historians are not free from this fallacy; how many opinions are based on the first appearance of an institution in our records, as if first appearance were the same as first occurrence. A custom may exist for a thousand years before it gets into our records, it may be by the merest chance.

 (7) "Antiquity." •1928. P. 234.
 (8) Hastings: "Encyclopedia of Ethics and Religion." s.v. Kings (Indian). The article on Mana as compared with Man, 1914, No. 4, and 1922, No. 79, might be quoted as an even

more glaring example, were it not an abuse of terms to call the mana school critical.

- (9) The learned merely reflect, sometimes anticipate, the spirit of the times. As scholars ignore the modern products of native learning, failing to realise that, as heirs to tradition, they may help us to understand tradition, and only take notice of those native scholars who ape the historical tone of modern Europe, so the politically minded masses turn a deaf ear to the inherited aspirations of the people and only take notice of those who have learnt to re-echo, with their tongues in their cheeks, the political cant of Europe.
 - (10) "Jatakas," No. 67, I. 306 ff.

(11) Common Prayer and The Catholick Faith.

(12) See my "Kingship," chap. VIII.

(13) Roman Clients = Indian sudra?; Pater = grhapati ?

Obituary.

Ginsberg

Professor Hobhouse. By Morris Ginsberg.

The sudden death of Professor Leonard Trelawny Hobhouse, on 21st June, at Alençon, Normandy, is a heavy loss to science and philosophy. Professor Hobhouse has made magnificent contributions ranging over the whole field of social science, psychology and metaphysics. Here it is proper to dwell on the more distinctively sociological side of his work. His "Morals in Evolution," first published in 1906, is now widely recognised as a classic in the study of comparative institutions, and the series of works published in 1921–4 and collectively known as "Principles of Sociology" (The Metaphysical Theory of the State, The Rational Good, Elements of Social Justice, Social Development) must assuredly come to be regarded as the most comprehensive and successful attempt made in recent times, whether in England or abroad, towards a systematic sociology.

Perhaps the most distinctive characteristic of Professor Hobhouse's work is to be found in his rare power of combining metaphysical speculation with detailed and painstaking empirical investigations. As a link between his scientific and philosophical studies he uses the conception of development of which he has given a profound analysis in his great work," Development and Purpose" (1913; revised and largely re-written 1927). He seeks to establish a broad correlation between the growth of mind in range and articulateness and the advancing movement of civilisation. The essence of his theory would seem to be that the work of the mind lies deeper than its conscious manifestations, that it is fundamentally an effort towards unity and integration, the sense of this unity constituting the spirit of the social structure and lying at the root of religion and morals. Having determined the nature of social development both from the point of view of natural science and philosophy he inquires into its conditions, environmental, biological, psychological and distinctively sociological. In developing his theses he elaborates a method of the greatest importance to the anthropologist and sociologist, on the one hand by working out what may be called a social morphology, and, on the other, by laying down criteria for the ethical valuation of the varying phases of social evolution. He is careful not to confuse questions of fact with questions of value, but in the end he seeks to bring together the results of his studies in social philosophy and sociology in a final synthesis culminating in a theory of the nature and possibility of social progress.

During the last few years Professor Hobhouse was engaged in a re-examination of the evidence relating to the sociology of the Hunters and Gatherers, which he intended to publish either as an appendix to a new edition of "Morals in Evolution" or as a separate volume. It is hoped that the material which he has gathered with so much labour will be found in a condition suitable for publication. Viewing Hobhouse's sociological work as a whole, one cannot but be profoundly impressed with the range and magnitude of his achievement, which must eventually entitle him to the highest rank among the founders of modern scientific sociology.

MORRIS GINSBERG.

REVIEWS.

Anthropology. Montandon.

L'Ologenèse humaine (Ologénisme). 104

By Dr. G. Montandon. Paris: Félix

Alcan. 1928. Price 125 and 200 fr.

Grand 8vo. xii+478 pp.; numerous figures, graphs, maps, and plates.

The book begins with a brief history of the world, with especial reference to the last phases. The drifting of the continents, according to Wegener, is illustrated by maps, and maps also are given of the migration of the north and south poles. A chapter is devoted to the origin of life and the origin of man, and to a reconciliation of the great theories on the latter

subject. Here and elsewhere, while stating the views of others, Montandon has numerous critical footnotes. These discussions lead up to his presentation of the main thesis of the book, Hologenesis, or the constant spontaneous dichotomy from the mother species. He claims that this theory of Prof. D. Rosa concerning the evolution of animals applies equally to man and that it reconciles monogenism and polygenism in man.

Accepting the theory of Wegener that all land was once a continuous disc, and that life arose on the littoral zone, then life should have occurred along the whole

line separating land from sea. From the innumerable myriads of specks of primordial life, which consisted of but a single species, all forms of living organisms have arisen. According to Rosa, each species arrives eventually at a "maturation point," at which moment all the individuals of the mother species die by giving birth to two daughter species which are different from the mother species; but these are of unequal value: one is precocious, the other is backward. A precocious branch can give rise to a precocious or backward branch, and vice versa. A time arrives when the new species reach their point of maturation when dichotomy is no longer possible, and when they attain their terminal stage. A terminal species, which may be on a precocious or backward branch, will not develop further and will persist until its death; thus certain lower animals, that have continued without change since ancient geological formations, may be considered as precocious and terminal species.

The peopling of the earth may not be made by migrations, as all older theories postulate, but the primitive species having occupied the whole of the habitable surface, the daughter species reduced their habitat in proportion and according to their differentiation by dichotomy. The species thus did not spread from centres, but have successively restricted their respective areas, except when new species arose which could adapt themselves to different conditions, e.g., marine and terrestrial species derived from littoral ones. According to Montandon, the theory of hologenesis reconciles the two great theories of monogenesis and polygenesis; the theory of the drifting of continents

supports that of hologenesis. Montandon next discusses the origin of man and, after describing the methods of physical anthropology and biometry, he enumerates the following five factors which contribute to the formation of human races: (1) The dichotomy of the branches of the species conformably, but in an attenuated manner, to the hologenetic dichotomy of the species; (2) The spontaneous action of the natural environment, to which are associated the use or disuse of organs and the struggle for existence; (3) Self-domestication, or the spontaneous action of the artificial environment, the action of which is more rapid than that of the natural environment; (4) Domestication, or the intentional action (comprehended selection) of the artificial environment (restricted action so far as it concerns (5) Miscegenation (of which the action will be more easily revealed by the knowledge of eventual migrations).

The classifications of Topinard, Deniker,

Stratz, Schurtz, Giuffrida Ruggeri, and others are given and discussed; adopted by Montandon consists of eight great races and twenty sub-races; these are: I. Pygmoid: 1. Steatopygous (Bushman, Hottentot); 2. Pygmy (Negrillo, Negrito). II. Tasmanoid: 3. Tasmanian; 4. Papuasian (Papuan, Melanesian). III. Negroid: 5. Negro (Palæotropical or Forest-Negro, Nilo-Charian, South African, Sudanian); 6. Panethiopian (Amhara); 7. Dravidian (a mixture of Negroid-protomorphs, Tasmanoid-protomorphs, Veddoid, Europoid-protomorphs and recent). IV. Vedd-Aus-traloid: 8. Vedda (Vedda, Senoi, etc.); 9. Australian. V. Amerinoid: 10. Palæo-Amerind (Lagao Santa): 11. Neo-Amerind (North Atlantic, British Columbian, Central, Patagonian). VI. Eskimoid: 12. Eskimo. VII. Mongoloid: 13. Siberian or Palaco-Siberian: Western (Ugrian (Ostyak of the Obi and the Vogul)); Central (Ostyak of the Jenisei, Palæo-Altaians); Eastern (Chukchi, Koryak, Kamchadale, Yukaghir, etc.)-Montandon suggests the erection of three sub-races: Mongoloid-Siberian, Europoid-Siberian, and Amerindoid-Siberian. 14. Panmongolian (Tungus, North Mongolian (Manchu, Korean, Gilyak-Aleute)); gonan (Marient, Korean, Chyake-Alente)); Sinian (North Chinese), Parecean or South-ern Mongoloid; 15. Turanian (Kirghiz, Turkoman, Turk, Tatar, Yakut); 16. Sa-mian (Samoyed, Lapp). VIII. Europoid: 17. Ainian (Ainu); 18. Blond race (Nordic, North Oriental; or Nordic, Sub-Nordic, North-western and Oriental of Deniker); 19. Alp-Armenian (Alpine, Adriatic; or Alpine Adriatic, Sub-Adriatic, and Vistulian of Deniker); 20. Brown race or Mediterranean (Ibero-insular, Berber, Arab, Indo-Afghan, Indonesian, Malay, Polynesian; or Indo-Afghan, Arab or Semite, Berber, Littoral or Atlanto-Mediterranean, Ibero-insular, Polynesian, and Indonesian of Deniker).

One is inclined to question whether the scheme of evolution is so simple as this theory of dichotomy suggests, and it is very doubtful whether many anthropologists are prepared to accept Montandon's diagram of the evolution of the races of mankind—at all events the present writer feels unable to do so.

According to Montandon, the hominide, and also the hominoids ("hominiens") arose over the whole surface of the earth, with obvious limitations. As for the human species, properly so-called, it has similarly arisen simultaneously (but not polyphyletically) over a very great part of the earth.

Every one, says Montandon, recognises that *Homo sapiens* has spread over the whole earth, but the same may to some extent have been the case for the prehumans (demi-humans), so that at the time of a dichotomy of which the two daughter species should have each tended to a concentration, the concentration was annulled by expansive force. The extinction of various hominide species naturally facilitated the expansion of others, but at first there was also a promiscuity of species. The great races whose primi30,000 years ago of an antarctic continent joining Australia and Tierra del Fuego! and on p. 308, in support of the affinities of the languages of Tierra del Fuego and Australia advocated by Rivet, he suggests a second more recent connection, some 3,000 years ago, and offers as an explanation that the Australians sailed as slaves to Easter Island and to America in Polynesian canoes; a statement with which few of

Species, Homo Napiens

Pygmorid

Southern sub-species

Tasmanoid

Vedd-Anstralaid Amereurasiatic sub-species

Negeoid

Americanid

Surasiatic sub-species

Estimoid

Surasiatic sub-species

Southern sub-species

Negeoid

Americanoid

Eurasiatic sub-species

Southern sub-species

Asiatic Surapoid

Mongoloid

Mongoloid

FORMATION OF EIGHT GREAT RACES (SUB-SPECIES) BY HOLOGENETIC DICHOTOMY. THE PRE-COCIOUS BRANCHES ARE INDICATED BY SHORT LINES AND THE BACKWARD BY LONG LINES.

tive domains, partially overlapping each other, being already very extended, have given rise to invasions, which were not effected on virgin lands but on territories, doubtless thinly peopled, though occupied for all time by man and his precursors. As Montandon holds that all the species which can be successively enumerated (only one at each level) in the ascent of man have been pan-terrestrial since the hatching of life, he can assert "There is "no cradle of humanity and no cradles of "the various human races."

The two long chapters which are devoted to a description of the races and sub-races of man will more particularly appeal to the majority of anthropologists. A notable feature is the valuable and well-documented account of the racial ethnology of Africa. It is also convenient to have concise statements of Montandon's own investigations on the Ethiopians, Palæo-Siberians, and Ainu. In order to account for certain supposed physical resemblances between the Palæo-Amerind race and his Tasmanoid great race, Montandon (pp. 193, 200) seems to incline to a belief in the persistence to

those who have studied conditions in Oceania are likely to agree

Despite much that is controversial in this book, it is one which merits the careful study of anthropologists. There are many suggestions of great value and there is a mass of accurate descriptions and data, supported by references, for which students should be profoundly grateful to the author. The bibliography runs to 70 pages and comprises over 1,200 references, which indicate the erudition and great industry of Dr. Montandon. There are 14 plates of excellent photographs of racial types and several valuable maps.

A. C. HADDON.

Prehistory. Foster.

The Travels and Settlements of 105
Early Man, a Study of the Origins of Human Progress. By T. S. Foster.
Pp. 320. London: Ernest Benn, Ltd. 1928. 21s. net.

This is a tale that is told by a sui generis diffusionist in wonderland, where one swallow makes an interglacial period. The author has read widely, speculated deeply, and written at length, concerning problems which have been solved by few before him to the satisfaction even of themselves. He may certainly be credited with industry and zeal, and his temerity arouses wonderment. To those who know the facts, and he instances a multitude, there is no great difficulty in separating out his speculations, but many readers will not care to put themselves to such a test of knowledge and endurance. There is a bibliography, but no references to authorities in the text, no footnotes, no illustrations, and no maps.

The author plays and relates a game of chess, one hand against the other, on the terrestrial globe, and he moves his pieces-Mousterians, Cromagnons, Papuans, Mongolians, Dravidians, but especially "Anatolians"—up and down and round the world, with ease and freedom. It is not only the travels of his early men that he throws into a narrative, but also the movements of their minds. None but the highly imaginative can know as much as Mr. Foster knows, for one example amongst many, of the social and diplomatic arts adopted by his Anatolians for the exploitation of their less gifted forerunners in the Thus-"This survey of the Pacific. " Melanesian evidence has so far led to "the conclusion that after a resolute " analysis of the situation and a compre-" hensive estimate of indigenous resources, " the Anatolians decided to accord to the "Dravidians superior credit as skilled " cultivators and to invite their observa-" tion of their own methods of instruction " in masonry, canoe and habitation con-" struction, commerce, weaving, pottery, " and the art of governance."

Many other things the author knows that most of us are never like to know, unless we also venture through the looking-glass. H. S. HARRISON.

Malta: Archæology. Murray.

Excavations in Malta. By M. A. Murray. Pp. 38; XXXV plates. 106 London: Quaritch, 1929.

In this third part of the series bearing the above title our Fellow completes her account of the excavations of the megalithic temple at Borg en Nadur with the final plan of the ruins, illustrations of new finds and a comparative analysis of the results. The three volumes thus constitute an indispensable monograph on Maltese antiquities. Miss Murray's site illustrates what may be

taken as the ground plan of the Maltese megalithic temples, a pair of communicating double apses leading to a semicircular "sanctuary" and opening on to a large court. It illustrates, moreover, three of the four main types of pillar found at other sites in which the author also suggests a typological evolution, the baluster form, not represented at Borg en Nadur, representing the latest variant.

Unfortunately, the remains discovered here provide little or no fresh evidence for dating the whole mysterious complex; sherds of Zammit's "neolithic" and "bronze age" classes were alike found with no such stratigraphical separation as was observed at Hal Tarxien. Sir Arthur Evans has shown, in The Palace of Minos, vol. II, that close Middle Minoan parallels offer an upper limit for the former class. The specimens of "bronze age' pottery published here and in the second part have such obviously late affinities that his seemingly revolutionary proposal may be regarded as confirmed. Thus the askoi (called here duck-vases), pedestalled bowls with a handle under the bowl, biconical mugs and amphoræ, and high handles with a V-shaped depression or fan-like lateral expansion at the peak all recur in transitional deposits in Sicily and contemporary or in some cases rather later deposits in Italy. The same Sicilian vases may be decorated with groups of wide shallow incisions supplemented by dots such as constitute almost the sole decoration of the intrusive pottery in Malta. Some of these features, such as the dented and fan-splayed handles, certainly may have a longer history in the western Mediterranean, as has the oculi motive on some sherds from Tarxien whose affinities lie with the copper age vases of Almeria and Denmark on the one hand and the anthropomorphic lids of Troy II on the other.

A curious feature at Borg en Nadur is the number of anchor-shaped objects of clay to which only Bahria offers parallels on the island. They closely resemble a group of neolithic "ornaments" from Thessaly and Central Greece, save that they are perforated. Miss Murray believes that they were actually votive anchors dedicated by sailors, the two sites where they occur being suitable places for such offerings. She does not, however, adduce any independent evidence for the use of the anchor in the Mediterranean before 1000 B.C. Such evidence is possibly to be found in certain signs on the Knossian tablets to which Sir Arthur Evans has recently called attention.

CORRESPONDENCE.

Sociology: Bride-price. Parry : Torday.

To the Editor of MAN. SIR,-Mr. Radeliffe-Brown's analogy

between bride-price and blood-money is ingenious, but I doubt whether it can be sustained.

Among the Nilotic tribes a bride does not sever her connection with her family, who claim a share of her daughter's bride-price.

My impression was that among these tribes girls are definitely regarded as a source of wealth. Every effort is made to obtain as large a bride-price as possible, and sharp practices, such as falsely alleging that the sheep, etc., paid were insufficient in quantity, or inferior in quality, or obtaining part payment and then repudiating the contract, are of frequent occurrence.

I do not remember to have heard of such practices in connection with blood-money, and certainly never met with a case in which an attempt was made to obtain it from anyone

other than the actual slayer.

The idea of obtaining blood-money by exposing superfluous members of the family to danger seems quite unknown, which would be surprising if the family were really, as Mr. Radeliffe-Brown suggests, a body cor-

It is quite possible, I believe, that blood-money, in its essence, is compensation not to the relatives but to the spirit of the deceased.

Yours faithfully, REG. PARRY.

SIR,-When I suggested the use of the word "earnest" in place of the customary "bride-price" I did so moved by the desire to raise a discussion. My gratitude to Professor Radcliffe-Brown for responding to the call is mixed with regret that he should suspect me of wanting to commit others to a sociological interpretation with which he disagrees. As I stated explicitly, my paper was not "written to impose a pet word of mine, but in the hope that criticism may produce a better one. If I were free in my choice my preference would be for a native term, such as the Ashanti azeda, as interpreted by Rattray; but any word not clearly defined by standard English dictionaries would speedily share the fate of lobolo and be distorted by theorists to suit their convenience.

As I am dealing in detail with this question in a paper which is to be published in the next number of Africa, I must refer Professor Radeliffe-Brown to that. I will mention, however, that "indemnity" is scarcely applicable to a gift which, according to the findings of the South African Native Customs Commission, answers the same purpose if it consists of a basket of corn or several head of cattle. Nor would an indemnity be returned if the person for whom it was paid were to die. In the great number of cases, when both the wife and the children belong effectively and permanently to the woman's clan, there can be no indemnity; besides, even in tribes with a patriarchal system it is an exception, a very rare one, that a woman should change her clan on marriage. Professor Radeliffe-Brown mentions Zulus and Masai; among the former, the woman never loses her isibongo, and among the latter, as Merker points out, the woman passes to her husband's family, but retains the membership of her clan.

As I have shown in a recent paper in the J.R.A.I., I am fully aware of the religious aspect of marriage, and it seems to me that it is just its spiritual significance which makes the use of "indemnity" even less desirable

than that of "earnest.

Yours faithfully, E. TORDAY.

ANTHROPOLOGICAL NOTE.

THE LATE PROFESSOR HOBHOUSE. The following appeal has been received 108 in reference to the late Professor Hobhouse :-4th July, 1929.

SIR,-The recent death of Professor Leonard Hobhouse came as a shock to his friends, who had looked forward to his having a good many years of further work and of develop-ment of the unique position which he has held in the study of the social sciences. We feel sure that many of those who directly or indirectly have come into contact with his work will wish to help in the establishment of some Memorial Fund with which his name may be permanently associated, and which may be used to assist in the perpetuation of his influence.

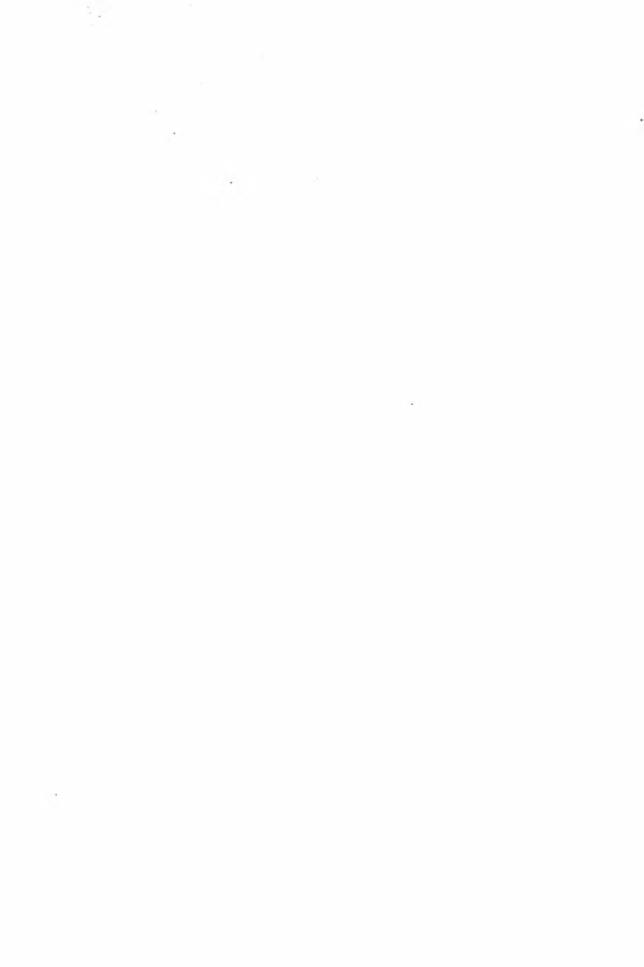
We ask the hospitality of your columns to invite subscriptions to such a fund. We hope that those who subscribe may leave us who sign this letter, as a Committee representative of the many sides of life which Professor Hobhouse touched, to frame a scheme for the memorial, and to settle at a later date whether

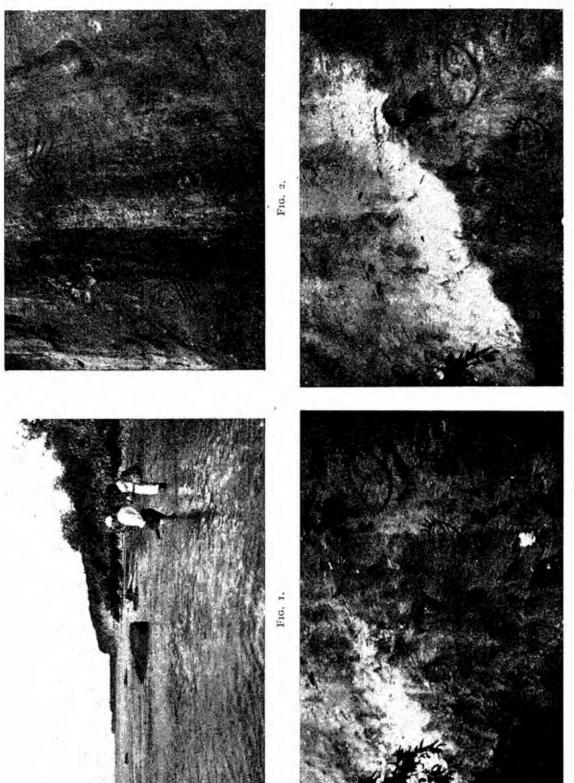
any fund raised can be used best for a lectureship, or in some other form. Meanwhile, we hope that you will allow us through your columns to call attention to this project.

Subscriptions may be sent to: Dr. G. P. Gooch, 76, Campden Hill Road, London, W. 8, who has agreed to act as treasurer of the fund.

Yours faithfully, (Signed)

S. ALEXANDER. W. H. BEVERIDGE. VICTOR BRANFORD. MORRIS GINSBERG. G. P. GOOCH. J. L. HAMMOND. J. A. HOBSON. GILBERT MURRAY. PERCY NUNN. HERBERT SAMUEL. C. P. SCOTT. HUBERT LLEWELLYN SMITH. ARTHUR STEEL-MAITLAND. GRAHAM WALLAS. BEATRICE WEBB.





ROCK PAINTINGS IN FIJI.

Fig. 3.

ORIGINAL ARTICLES.

With Plate I-J.

Fiji: Art.

Paine.

Some Rock Paintings in Fiji. By. R. W. Paine.

400

During the course of entomological work amongst the islands of the Fiji group in July and August, 1927, I made a visit to Vatulele, famed locally for its red prawns and rock paintings.

No reference to the rock paintings has been discovered in literature on Fiji, and there seems to be much speculation locally as to their origin*; so that it seems desirable to publish the following brief account and photographs.

Owing to the brevity of the visit very few data concerning the occurrence or detail of the paintings themselves were actually noted down, so that much of what

follows is merely the substance of a rather vivid memory of the locality, and as such may very possibly be fraught with minor inaccuracies. It is therefore to be hoped that this very summary account of Fijian rock paintings may arouse sufficient interest in them for a further more detailed examination to be made by any archæologist who happened to be on a visit to the country.

Vatulele is a small island, 8 miles long, lying nearly 20 miles from the reef bounding the south coast of Vitilevu, the largest island of the group. It occupies a somewhat isolated position; and, owing to this and to the fact that it has no good anchorage, the island is seldom visited by Europeans.

The native settlement on the island comprises some three or four small villages. There are no European inhabitants.

The island is entirely composed of reef limestone; and, as far as could be ascertained in a very brief inspection, seems to have been formed by the uplifting and tilting towards



Fig. I.—figures drawn, from the photographs, to illustrate the various types of design found on the coral cliff of vatulele—fiji.

Scale approximated.

The areas covered by the pigment are heavily stippled. The body and head of the "Cock" are too much weathered in the actual paintings to allow of more than their approximate limits being indicated by faint stippling.

the east of a considerable tract of ancient coral reef. Thus the eastern seaboard of the island is an extensive beach with a barrier reef, whereas the western is skirted by a fringing reef, and presents an almost continuous coral cliff face, attaining in places a height of over 100 feet (Plate I–J, Fig. 1).

It is on the lower part of this cliff, at a distance of about a mile from the northern

end of the island, that the rock paintings occur.

The cliff is at this point bordered by a narrow shingle beach, at the top of which there is a fairly dense growth of shrubs, which hide the base of the cliff from the view of anyone passing along the shore. Owing to the presence of this vegetation, and

^{*} Many seem to think that they were made by shipwrecked sailors!

the late hour (4.30 p.m.) at which the locality was visited, the photographs of the paintings themselves are not very distinct; moreover, it was not possible to avoid tilting the camera upwards in order to include in the photograph the main assemblage of paintings, so that the latter appear somewhat distorted in the accompanying figures.

Paintings were found at three places along the cliff, separated from each other

by about a hundred yards.

Plate I-J, Fig. 2, shows most of the paintings of the centre group; Plate I-J, Figs. 3 and 4, show those of the southernmost group. The photograph taken of the northernmost group of paintings is unfortunately too poor to be worth reproducing; this group, however, consists solely of some three or four "Bush-cock" paintings, no better preserved than those occurring in the centre group.

The individual paintings which occur in the three groups are as follows (see

Fig. 1):-

North Group.—" Bush-cocks "* (three only noted).

Centre Group.-" Bush-cocks"; Pigeon*; hand marks (several).

South Group.—Human faces (three only noted); hand marks (numerous);

Pigeon; "shields" (two noted).

The paintings are, where least weathered, brick red in colour; the latter resembling rather closely that obtained from the bark of a species of mangrove (the "doga" tree of the Fijians), used by the natives as a dye. They show up quite distinctly against the pale grey surface of the limestone cliff.

The "hand marks" are "negative," showing up light against the red background. These hand stencillings are more numerous than any other design and extend up from near the base of the cliff for some 20 feet. They occur in no regular arrangement.

The largest and most intricate designs are those representing human faces. These occur about 12 feet up the cliff from the present ground level. The largest is some 18 inches in width.

One of the designs referred to above as "shields" can be seen in Plate I-J, Fig. 3, near the bottom right-hand corner. Another painting of similar type, i.e., resembling a shield or coat of arms in outline, occurs within a few feet of that shown in the figure.

The face of the cliff hereabouts is quite perpendicular and remarkably smooth; so that an artist wishing at the present time to avail himself of that portion of the rock occupied by the ancient paintings would be obliged to use a ladder, or to have

himself lowered from the top of the cliff by means of a rope.

It will be noticed that on the cliff face shown in the centre of Plate I–J, Fig. 1, in the distance, there is a dark horizontal line extending along the base of the cliff. This is actually a well-defined ancient wave-cut beach level which can be easily traced (with readiness) all along the west coast of the island. So that here, as on the nearest "mainland" (Vitilevu) at Malaqereqere—described recently by two American geologists, † there is evidence of a recent negative movement, which may have lasted until very recent times.‡ It is therefore conceivable that when the paintings were made that part of the cliff on which they occur was nearer sea level.

The inaccessibility of the topmost paintings from the ground must strike anyone visiting the locality to-day; and, while not intending to suggest that negative movement of the shoreline is the certain solution of the problem as to how they were reached by the original artist, I think it worth while to mention the fact that a

^{*}There is a species of bush fewl common on many islands in Fiji, and this, like the large native pigeon, is almost certainly an indigenous species.

^{† &}quot;Recent Negative Shift in the Strandline in Fiji and Tonga," by Harry S. Ladd and J. Edward Hoffmeister.—Jour. Geology, Vol. XXXV, No. 6, 1927.

[‡] loc. cit., p. 550.

definite raised beach level occurs along this coastline. Unfortunately no notice was taken of the occurrence, if present at all, of the raised beach at those places on the cliff where the paintings occur. This is a point which might well be investigated

by anyone visiting the locality in the future.

The face of the rock is coated in places with a thin veneer of very hard recrystal-lised calcite, deposited presumably by moisture trickling down the face of the cliff. This newer coating of calcite crosses certain of the paintings (e.g., note the left face design of Plate I–J, Figs. 3 and 4), causing more or less of obliteration. Thus the heads and bodies of the bush-cocks (Plate I–J, Fig. 2) are almost entirely obliterated. Except for this, the paintings seem rather well preserved, and there is remarkably little scouring of the cliff face. So hard is the rock that it fortunately defied the rather too inquisitive efforts of one visitor to the site, who said that he was quite unable to chip off any of the paintings with a hammer.

The natives inhabiting the island do not seem to attach any importance to these rock paintings; and, as far as could be ascertained, there is no traditional story associated with them. Apart from knowing of their existence the natives appear to be quite disinterested in them; although the red prawns, referred to above, which occur in land-locked salt-water pools within a few hundred yards of the paintings, are regarded as devils, and "tabu" as food by the natives, who firmly believe that

shipwreck will be the fate of all who carry such prawns from the island.

Rock paintings have not been found in any other part of Fiji, so that it would seem that those on Vatulele may prove of special interest in demonstrating the presence of ancient man in this part of the Pacific.

R. W. PAINE.

Africa, South: Burials.

Laidler.

Burials and Burial Methods of the Namaqualand Hottentots.

By F. W. Laidler, F.S.A. (Scot.).

The evidence of early observers will be taken first. According to Graevenbroeck (1685), four or more strong men carried the deceased on their hands, not raised, through a hole made in the side of the hut. Campbell (1815) states that the dead were buried in their worst kaross or skin cloak, in which the body was wrapped up and then placed in a shallow round hole. A chief would be buried in a deeper one. The Hottentots told Barrow (1806) that the stone-covered graves conveyed no distinction as to chief or commoner. The only difference was in the amount of trouble that the sorrowing relatives cared to take. Stow (1870 circa) described the burial attitude as more or less that of flexion. Used as the Hottentot is to the squatting posture when awake, it is also his attitude when asleep, and is the posture in which the least amount of heat would be lost; also, it enabled a small kaross cloak to cover efficiently the compact body. This fastening up of the body in a kaross was for ease of removal and reduction of bulk. With the advent of the missionaries came the use of European clothing and the extended position for burial, which by 1850 was general throughout Little Namaqualand.

Two other points must be mentioned: it was usual to bury some article with a chief, and the gemsbok-horn-tipped stick used as a spade was left standing upright in the graves. A further point was mentioned to me by Sam Klaase, namely, that the old Namaquas always placed one long stone in an upright position in the centre of the stone-covered mound. This I am able to corroborate, in that in many of the obviously ancient mounds that I have opened this upright central stone was in position. The stones around were neatly arranged with an inward slope that prevented them falling outwards as the loose soil settled, and so perhaps exposing the grave to attacks from burrowing animals. As the mound settled, repeated droughts dried and powdered the earth between the ston es

rodents and lizards took up their quarters in the crannies between, only to be displaced later by snakes, scorpions, and tarantulas. These, and the deserted nests of bulb-eating animals, lined with husks, are among the first finds to be made when the stones of the mound are removed and until the ground level is reached.

That powdered ant-heap ground was used for filling in the grave seems to be borne out by the looseness in many places of the contained earth, which at times allows the grave to be cleared and demonstrated in its original dimensions. The hole at the surface is circular, and on section is an inverted truncated cone, at the bottom of which, towards the east, is a small cavity, hollowed out, into which the corpse was huddled and covered with bushes.

Of thirty-six burials examined, twenty-three were in sufficiently good condition to afford evidence of method of burial. Of these latter, only two reclined on the right side. The axis of the body varied from north and south, with the face to the east, to north-east by east and south-west by west. With two exceptions, all faced east. Of the unusual positions, one faced west and the other south. In six cases the skeletons were those of children, in two cases those of infants underone year of age; in one case the skeleton was that of an old woman who had lived her century. The graves did not invariably have a niche at the side, and the position of the buried corpse could but seldom have been in a sitting position, for in most cases the angle formed by the body and the horizontal plane was not more than 15 deg., and the earth upon which the bones rested was virgin soil, undisturbed, hard, and one with the surrounding mass.

The graves described all belong to a period anterior to the appearance of the missionaries in 1816, and most would be anterior to the year 1750, the year in which the first farm was granted to a white man in Namaqualand. Several of the groups of graves occur near roads, and, in one instance, a road is actually made over portion of a group. These roads originated as tracks between the first farms around the Kamiesbergen, and were in use in 1780–90, so that the facts read from the grave may be taken as referring to the Hottentot when practically uncontaminated by Europeans.

The graves occurred in irregularly arranged groups of five, three, ten, four, two and twelve. Some of these groups, when the individual graves had been examined, gave information that enabled one to reconstruct to some extent the tragedy that at times overtook Hottentot families. First, take a list of the recognisable injuries and diseases: Dislocation of the lower jaw, dislocation of the spine, fracture of the base of the skull, fractures of leg bones, dislocation of neck vertebræ, fracture of the lower jaw, and fractures of the vertex of the skull due to kirrie blows, pyorrhea, tuberculosis or other infection of the hip joint. In one group the bodies obviously had been buried some considerable time after death. They were uncontracted, arms and legs lying in loose positions just as the corpsehad been rolled into a shallow excavation and hurriedly covered. This group consisted of an old woman whose neck had been broken, after which her assailants jumped upon her until all her ribs were fractured and her chest flattened; a baby with a burst head; a boy of eight whose lower limbs had been broken; and two men of about thirty to thirty-five years of age who showed no bone injuries and probably died from arrow or assegai wounds; and, lastly, a young woman, who either was pregnant when killed or with whom a new-born baby had been buried. This group certainly represents a Hottentot family murdered by Bushmen whoraided a kraal on the banks of the Quick River.

In another case the grave was one of a group of four so situated that they were obviously over 150 years old. The body, that of a youth of twenty years or so, was contracted to an extreme degree, and protected by three large stones placed dolmen fashion at the bottom, not the side, of the pit. The lower left

lateral, upper left lateral, and canine teeth had been fractured some time before burial. A large antral abscess on the right side had perforated the palate, and also there had been an abscess above the root of the left upper lateral tooth. Around all teeth was a deposit of thick, hard, green tartar suggestive of long-continued pyorrhea. The right os innominatum or hip bone was hypoplastic, and the acetabulum atrophied. The bones of the right leg were missing, due either to loss of the leg before death or to rarefaction of the bones and consequent decay. I incline to the former hypothesis. The difference in size between the two sides of the pelvic girdle was that of several years growth. The state of this skeleton implies that for some years after an injury, probably the loss of a leg and the shattering of several teeth during a fight, this youth was fed and carefully looked after, and after death given a burial that alone of all those examined allowed the earth to press but lightly upon him. Perhaps he was a chief's son.

Another skeleton gave a good example of the gentle manners of the Bushmen. In digging a garden in the little town of Garies, a skull was found. On carefully uncovering the remainder of the bones, it was seen that the body had been thrust down an aard-vark hole. It was the remains of an enormously broad-shouldered Hottentot, who had been struck on the head from behind with a kirrie and received a depressed fracture. One leg was broken. His ribs on either side had been cut in a semicircular fashion through the cartilage, leaving the breast-bone in position and a rib wing on either side. These wings had been forced back until they met behind. Then his back was broken and his remains ignominiously thrust into the ant-bear hole. This "filleting" was a favourite method of torture with the Bushmen, and was their usual method of dealing with enemics. The breaking of the back over the flexed knee I have heard described by an eyewitness, now aged, who during her youth in South-west Africa saw Bushmen doing this to render the body more flexible for burial.

From this account it will be seen that it was not invariable to abandon the aged to wild beasts for burial, and that babies received equal treatment with adults. It does not appear that burial was proof of respect or of belief in other pastures. It does appear that the Hottentot had a fear of death, and a fear of possible effects from the inhaling of odours from decaying human corpses. Certain substances were used by the Hottentot to stuff into the nostrils when dealing with the dead, or to use as snuff, to prevent individual infection.

F. W. LAIDLER.

Arabia: Religion.

Gordon.

The Zār and the Bhūt: a Comparison. By Capt. D. H. Gordon, D.S.O. 111

While serving recently in Aden I made the acquaintance of a useful agency, to which in Southern Arabia almost anything of a supernatural form is ascribed, and which is called zār. Zār as now applied seems to cover almost any experience that cannot be accounted for in a reasonable way. The true zār, however, is an evil spirit that possesses people, producing forms of frenzy. In this way epilepsy and hysteria of any kind are attributable to possession by zār. This in every way conforms to the present-day ideas of the bhūt in Northern India, where bhūt not only applies to possession exemplified by epilepsy, hysteria and other less attributable symptoms, but also ghosts and similar supernatural phenomena.

According to Zwemer,* the belief in $z\bar{a}r$ is common throughout Arabia, Egypt, Abyssinia, North Africa, Malaysia and India. At the same time, it appears that he considers the $z\bar{a}r$ to be a purely Moslem custom; though, of course, there is no

^{* &}quot;The Influence of Animism on Islam," by S. M. Zwemer.

doubt that both the $z\bar{a}r$ and the $bh\bar{u}t$ are only local manifestations of a worldwide and primitive, one might almost say the primordial, form of belief concerning contact with the supernatural—a worldwide belief in supernatural agencies more intimate and apprehendable than the theology of sophisticated religion. They are essentially "familiar" spirits, for, although the uneducated Punjabi may be hazy about gods, he is full of information about $bh\bar{u}ts$.

Zwemer insists very strongly on the sacrifice and blood ritual employed in the $z\bar{a}r$ ceremony. He states that three features must be present—incense, dance, and sacrifice. These are all essentially acts of propitiation, and savour more of worship and compromise than of true exorcism. This propitiatory $z\bar{a}r$ ceremony does, from the evidence, undeniably take place in Egypt and Arabia, but this is not true of India or Abyssinia. Here the $z\bar{a}r$ or its equivalent is not propitiated but threatened, no attempt being made to placate or buy off the attentions of the spirit, which is driven out by exorcism.

Zwemer quotes Plowden as saying: "The favourite remedies are amulets and vigorous tom-toming and screeching without cessation, till the possessed, doubtless distracted with the noise, rushes violently out of the house, pelted and beaten and driven to the nearest brook, where the zār quits him and he becomes well. . . . The zār is frequently heard, indeed, singing to himself in the woods; but woe betide the human eye that falls on him!" This last detail is typical also of the bhūt, who can be heard singing in waste and desert places but who passes by unseen.

Speaking of Muscat, the same author quotes Miss Luton, of the American Mission, describing a place of exorcism called the Bait-el-zār: "It is only the "rich who can afford to undergo this treatment. The poor are branded with a "hot iron, or suffer cupping (blood letting), which does not cost so very much."

This may be the explanation of the whole matter. The rich are exploited by unscrupulous persons who profess to be able to act as an intermediary with the $z\bar{a}r$. The poor, who cannot afford to procure the assistance of these traffickers with the powers of evil, have to endure the infliction of the more popular and orthodox forms of exorcism; for, whatever the religion or whoever the people concerned may be, there is, as a rule, no compromise with the spirits of possession.

The three requisites of the $z\bar{a}r$ ceremony instanced above do not appear in the following description of exorcism in Abyssinia, quoted by Capt. Bourke* from an article in the Washington Evening Star, 17th October, 1885: "The following is described as the Abyssinian way of exorcising a woman. The exorcist lays an amulet on the patient's heaving bosom, makes her smell of some vile compound, and the moment her madness is somewhat abated begins a dialogue with the bouda (demon), who answers in a woman's voice. The devil is invited to come out in the name of all the saints; but a threat to treat him with some red-hot coals is usually more potent, and after he has promised to obey he seeks to delay his exit by asking for something to eat. Filth and dirt are mixed and hidden under a bush, when the woman crawls to the sickening repast and gulps it down with avidity. If the vile compound here mentioned, and the toasted dog's excrement instanced by me in my previous paper on bhūls in the Punjab,† can be classed as incense, then that element is present, but it is obvious that the real intention is the shaming or driving away of the intruder."

In this account we have the threat of hot coals, which shows some similarity to the hot-iron treatment of the poor in Arabia.

 [&]quot;Scatalogic Rites of All Nations," by Capt. Bourke.
 † Man, 95, 1923.

The heaving breast of the patient, the dialogue with the spirit who strives to delay his departure, the final yielding to drastic measures rather than to entreaty, are all typical of the exorcism of a bhūt in India."

That the $z\bar{a}r$ and the bouda are identical is shown by an Ethiopic charm quoted in full by Elworthy,* where the owner of the charm is protected against $z\bar{a}r$ wa $kur\bar{a}n\bar{a}$ ($z\bar{a}r$ and evil possession) and wa $\bar{a}y\bar{e}n\acute{e}$ $z\bar{a}r$ (and the eye of the $z\bar{a}r$); showing that the $z\bar{a}r$, like the $bh\bar{u}$, is identified, first with evil possession, and secondly with the evil eye or a cursing.

The wearer is also, however, protected against tarive wa booda, the clever wicked and sorcerers. Elworthy quotes Isenberg's Ahmaric Dictionary as giving booda, adj. mad; subs. sorcerer, sorceress; and, further, as stating that the Abyssinians ascribe to the influence of booda every kind and degree of mania, epilepsy, etc. This invites most temptingly an identification of the Abyssinian booda with the Indian bhūt or bhūta, both the names and the attributes having a surprising degree of similarity. Isenberg is also quoted by Elworthy as saying, "Zār worshippers work themselves into a phrensy by smoking, praying and "shaking of the head." This is curiously typical of those possessed by a bhw, both in cases of obviously induced frenzy and in what can be termed genuine possession. In the latter case the person will move the head, while lying on the back, by rapidly turning the face to look first in one direction, then in the otherthat is to say, a horizontal twisting of the head from side to side by a spasmodic jerking movement. In the former case, however, the person is usually squatting, and wags the head from shoulder to shoulder with a pendulum motion. I have seen a woman of the syce caste at Ambala squatting by the roadside, surrounded by half a dozen of her women friends, purporting to be possessed by a bhūt, and who was working herself into a deplorable state by alternately gabbling incoherencies and vigorously shaking her head from side to side in the manner described above. Her friends were sitting by, partly because of the normal attraction that kind of spectacle has for the uneducated, also because they were hoping that oracular answers might be given to the usual questions affecting childbirth, the sex of expected children and, above all, something that might be construed into a hope for the childless. This scene may be considered virtually to constitute a form of séance, and it is by the method described that the medium purports to put herself en rapport with the bhūt.

There is, moreover, a further but fortuitous similarity which shows that both the $z\bar{a}r$ and the $bh\bar{u}t$ are the same, not only in their attributes, but also in the temptations they offer to the unscrupulous.

When the ceremony of exorcism of a $z\bar{a}r$ takes place, it is the custom that the house of the individual possessed should provide a feast to friends and relatives to ensure the efficacy of the cure. The friends and relatives of a well-to-do but stingy husband will induce his wife to feign possession by $z\bar{a}r$ in order that they may feast at his expense.

In India it is both common in current facetious tales and in everyday life that a woman who has a lover will take some other woman into her confidence. Between them they will arrange that, on the wife feigning possession by a $bh\bar{u}^t$, the husband will be sent by the accomplice on a distant errand to procure some drug or someone indicated as sufficiently skilled in mantrā to cast out the $bh\bar{u}t$. On the departure of that poor "wittol," the waiting lover speedily enters to charm away the offending $bh\bar{u}t$.

D. H. GORDON.

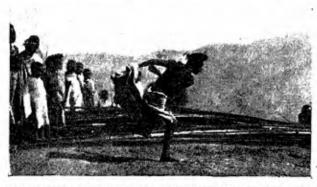
Assam: Games.

Hutton.

A Fijian Game in Assam. By J. H. Hutton.

Deane, in "Fijian Society" (p. 15), describes, as the "National game of 112 Fiji," a sport called veitingga, played with a reed (tingga) which has a cigar-shaped wooden point, and which is thrown on a specially cleared throwing-ground. The thrower of the reed holds it in the right hand, with the index finger (which gives it its final impetus) firmly pressed on the end of the reed. Williams, in "Fiji and the Fijians" (1870; I, p. 162), speaks of the game as tiqa or ulutoa, and describes the reed as skimming along the ground, and also refers to the specially prepared throwing-grounds. Brown ("Melanesians and Polynesians," p. 340) describes the game of tangatia in Samoa as consisting "in darting a light stick along a road made hard and smooth." A reference to Codrington ("The Melanesians," p. 340) and to Turner ("Nineteen Years in Polynesia," p. 212) makes it quite clear that the reed is so thrown that it may first strike the ground and then spring upwards and skim towards the mark. Codrington notes that in Mota a special decimal set of numerals is used in scoring instead of the usual quinary set.

I do not think that the occurrence of this game in Further Asia has hitherto been reported, but the game is popular in the Dzunokehena group of the Angami Nagas, and is played also by some villages adjoining this group. A prepared ground is required, affording a smooth, hard and sloping surface on to which the reed must



ANGAMI NAGA REED THROWER, IMMEDIATELY AFTER DELIVERY.

be driven in order to make it rise and skim. ground is commonly chosen to face down a village street so that any deviation from the straight takes the missile out of bounds. As in the case of the Fijian game great accuracy is required to make the dart come a hundred vards (vide Deane, loc. cit.). The Angami game resembles the Fijian game in that no mark is set up, distance in a straight line being taken as

the test of skill, but the Angami reed has no wooden head; in Samoa apparently a mark is set up (see Turner). The reed is propelled, under arm, by the Angami precisely as described by Deane, who, however, does not mention whether the reed is thrown running or standing. The Angami takes a fast run and delivers the missile at the height of his impetus. The game is called cheda or phyeda or phyelida in the Dzunokehena villages, and the Tengima Angami, who do not play the game, call it Kephrie-chie.

The same game, though rapidly disappearing, is still played in the plains of Assam, with the variant that the player whose reed goes furthest is placed transversely and the others try to go underneath it. The game is called s'ar-khela in Assamese.

In one or two of the Chekrima Angami villages adjoining the Dzunokehenå country a variant of the game is played with a stick instead of a reed. This stick is grasped in the palm of the hand near one end and thrown over-arm (instead of under) hard on to the ground so as to strike it with the end of the stick, which bounds up in a straight line forwards. Sika, the name given to it, means "stick-hop." Both games are played one side against another, the losers standing drinks at the end. This variant, with a stick replacing the reed, appears to be played on the Parapit river in South America, where it is called huirahuahua, vide Nordenskiöld, "Les Indiens du Chaco" (Paris, 1922, p. 171).

In connection with the appearance of the game of veilingga, both in Assam and in the Pacific, it is worth noticing that the game played with the flat round beans of Entada scandens has the same distribution. Indeed, there almost appears to be a verbal connection between the Sema Naga name for the bean—alau, and the Fijian name Walai. The game, called lavo, in Fiji, is described by Deane and Brown in the passages referred to above, and by Turner (op. cit. 215), the Samoans calling it lafonga tupe and using discs of cocoanut shell. In this case the occurrence of the game in the Philippine Islands, where it is called lipi or lipai (Cole, "The Tinguian," p. 277) affords a link between its distribution in the Pacific and on the continent of Asia, where it prevails at any rate throughout Burma and the Assam hills south of the Brahmaputra.

J. H. HUTTON.

Africa, West: Technology.

Daniel.

Note on a Gong of Bronze from Katsina, Nigeria. By F. Daniel.

I attach a photograph of a gong of bronze which has lately come into the possession of the Emir of Katsina.

It is said that this gong was one of several articles unearthed at Chaduwa, near Agie, in the subdivision of Tassawa.

I have not been able to obtain any information regarding the other articles and, as far as I can discover, nothing but the gong was brought into Nigeria.

The gong appears to have been cast by the cire perdue process. The handle is apparently a separate casting, inserted through the body of the gong and brazed on the outside.

A rough analysis showed the following proportions:—

Tin - - - 15 per cent. Copper and

other metals 85 ,,

The gong itself is covered with scratches, which appear to be the result of blows from some metal instrument.

It also bears two incised marks as under. (Fig. 2).

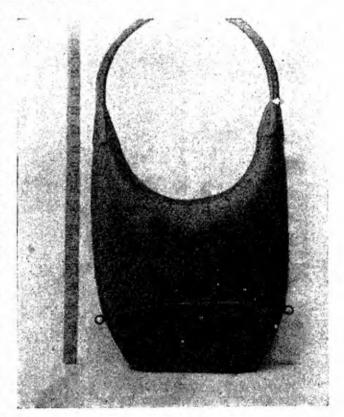


FIG. 1.

A is perhaps intended to denote a serpent, or possibly it is of phallic significance.

B. appears to be variant of the mark known as Tagayez, i.e. Greater Bustard, which is borne as a camel brand by several tribes of the Toureg.



Fig. 2.

The combination \(\psi \) U is known as Tagayez Iralwayan and is the brand of the Iralwayan, a sub-tribe of the Kel geres Toureg.

I am informed that a gong of this type is called Attubul in Tamashak and was used to keep the members of the caravan from straggling on the march.

F. DANIEL.

REVIEWS.

Festschrift.

Koppers.

Festschrift P. W. Schmidt.

Herausgeber W. Koppers. 11 in.

× 7³/₄ in.; pp. xxxi + 977, 2 maps,
41 plates and 158 illustrations in the
text. Wien: Mechitharisten-Congrega-

tions-Buchdruckerei, 1928.

All English-speaking anthropologists will join with the contributors to this monumental volume in congratulations to Pater Schmidt on his sixtieth birthday and in expressions of admiration for the valuable contributions he has made, in a life filled with many other duties, to some of the most obscure fields of linguistics, ethnology, Religionswissenschaft (an English equivalent for this word is badly wanted) and prehistory. His labours in these subjects are well reflected in the bibliography here printed, extending to 150 items in a period of less than thirty years, and in the 76 papers contained in the main body of the volume, very few of which show no signs of Pater Schmidt's influence. The Festschrift comprises contributions in English from Sidney Ray, C. O. Blagden, John M. Cooper, A. L. Kroeber, R. H. Lowie, Erland Nordenskiöld, N. W. Thomas and M. Vanoverbergh.

THEODORE BESTERMAN.

Prehistory. Ebert.

Vorgeschichtliches Jahrbuch. 115
Edited by Max Ebert. Vol. I, pp. 157; Vol. II, pp. 344. (Covering the years 1924–25.) Berlin: Walter de Gruyter. 1926.

These volumes constitute an annual bibliography of the Prehistory of Europe, Egypt and Asia Minor, compiled from periodical literature and classified under

countries and subjects.

The portion devoted to Great Britain and Ireland has been divided into the usual cultural divisions, but no arrangement of authors has been attempted—thus we find the name Deane at the beginning of Great Britain, Neolithic, and that of Curle at the end. Spelling mistakes are frequent and irritating; on p. 214 Mr. Waddell's name is spelt Waddel, and Mr. Burkitt appears under the pseudonym of M. C. Barkitt (p. 211). On p. 210 we

are introduced to the Belfast Art Sablery and Museum, and on p. 216 we find "Trannion" for "Trunnion"; doubtless there are many other mistakes of this kind.

It would be better too if a more equitable division of space was allowed to the different countries; the bibliography of France is dismissed in one page, while that of Italy occupies 30 pages.

No doubt future numbers will improve on the editorial side, and make these year-books a valuable contribution to the bibliography of Prehistory. L. J. P. G.

New Guinea: Ethnography. Malinowski.

The Sexual Life of Savages in North-western Melanesia: an ethnographic account of courtship, marriage and family life among the natives of the Trobriand Islands, British New Guinea. By Bronislaw Malinowski. With a preface by Havelock Ellis. With 96 full-page plates and figures. London: G. Routledge & Sons, Ltd. 1929. Pp. xxiv, 506. Price £2 2s.

It was over twenty years ago that Krauss and his associates in Germany began to offer serious contributions to a study of the sexual life among early and primitive peoples, and to this day the bulk of their work has not found its way into the British Museum or into any university or public

library in this country.

In the present admirable volume Professor Malinowski raises the curtain upon the sexual life of the inhabitants of the Trobriand Islands, and gives us a picture of the sexual freedom of savage man at a time when his morality has not been seriously affected by Western influence. Much of what is here published has been said before in certain other works by the same author, but the detailed treatment of the erotic life is new, and it is on this that a great part of the value and interest of this work depends.

Professor Malinowski begins by a general account of the relation of the sexes in tribal life and the position of woman in native society. He then arranges his material so as to afford a clear picture of the sexual life of the individual from

childhood to old age and death. Thus in his treatment of the sexual life of children he deals in detail with the almost unrestrained intercourse between the sexes which in boys begins about the tenth year and in girls from the sixth to the eighth. Before the on-coming of puberty many sexual practices are indulged, and from adolescence until marriage there is little hindrance to the satisfaction of sexual desire on the part of both sexes as long as this is carried out without violating the rules of Trobriand society. It may be stated here that, according to Professor Malinowski, the ignorance of the father's part in procreation is the most important factor in the legal system of the Trobrianders, and if we accept this as true it must also play a profound part in the native view of sexual activity. Thus it must not be imagined that Professor Malinowski's work is a typical picture of the sexual life of savages, as Dr. Havelock Ellis is inclined to suggest in his preface to the present volume. It is merely a detailed account of the sexual life of certain Papuo-Melanesians, living under a matrifinial society and holding views of procreation which are certainly not commonly found. Indeed a number of eminent authorities have doubted the existence of such ignorance in peoples surrounded by others who possess knowledge of paternity, and Professor Westermarck has already suggested that this ignorance is not so great as has been supposed. In the present work Professor Malinowski again supports his thesis of the reality of this ignorance with a mass of evidence so cogent that it is difficult to escape from his own conclusions; and thus the belief of the Trobrianders is seen to fall into line with that of other peoples such as the Arunta and the Loritja of Australia. Their views can be compared with ideas now occasionally found only in myth and legend, such as the story current among certain of the Eskimo that coitus merely nourishes the child and does not produce it. We cannot discuss here the evidence for this belief, but it may be pointed out that the comparative rarity of illegitimate children, coupled with the infrequency of abortion, offer a problem of great interest which Professor Malinowski has not found himself able to solve. Perhaps, however, the best evidence for the reality of this belief among the Trobrianders is the treatment they accord to their pigs; for they permit the breeding of their European specimens with the bush animals, thereby lowering the quality of the whole breed, and at the same time refuse to admit the fact that the resulting progeny is in any way connected with the bush pig, the flesh of which they hold in genuine horror and disgust. What

concern, then, has sexual intercourse with procreation? According to Professor Malinowski the view of the natives is that it merely opens a way for the birth of a child bestowed by the spirits, and this belief can be coupled with the widespread stories of pregnancy resulting from hymeneal perforation by inanimate objects.

This ignorance of the facts of procreation must naturally have an enormous effect upon the sexual and social life of the people. Young persons before marriage enjoy a life of freedom entirely unknown amongst many other people, and the girls, unembarrassed by unwanted children resulting from their amours, are free to develop a sexual life where the pleasures of coitus are wholly divorced from the responsibilities of generation. This remarkable condition of affairs has, we suspect, a greater influence upon the life of the people than Professor Malinowski may be inclined to admit; although here and there he allows himself a few very wise remarks when dealing with the absence of perversions among his hosts. In his chapters on customary forms of licence, psychology of love-making and the manners and morals of the people, the author shows himself fully alive to the importance of comparative material, although he does not seem quite aware of the curious implications involved in his account de figuris veneris with what appears to be a peculiar or perhaps un-usually noticeable feature of the female anatomy.

Having dealt with the importance of the magic of love and beauty, Professor Malinowski closes with an account of erotic dreams and fantasies together with a brief survey of a savage incest myth. The author is to be congratulated upon his work. As an account of the sexual life of a limited group it is unequalled, and Professor Malinowski's knowledge, not only of the more complicated problems of sociology but also of the rarer forms of sexual activity among modern Western peoples, make the volume of particular interest and value. In a later edition it might, perhaps, be as well to include an account of the anatomy of the natives both as regards their primary and secondary sexual characteristics, and also certain sections of the index require rearranging. Apart from these defects the volume does the highest credit to both author and publisher. Admirably illustrated, printed and bound, the book will take its place as one of the most notable English contributions to the study of the sexual life of

E. J. DINGWALL.

Art.

Stolpe.

Collected Essays in Ornamental
Art: I. On Evolution in the ornamental art of savage people. II. Studies in
American ornamentation. A contribution
to the biology of ornament. By Hjalmar
Stolpe, Stockholm, 1927, Astonbl. Trykeri.

Pp. 128, 20 plates.

The first essay was published in Ymer, in 1890, p. 193, and an appendix to it, discussing Sir Hercules Read's paper (J.A.I., xxi, 1891, p. 139), in Ymer, 1891, p. 197. This was translated by Mrs. H. Colley March in the Trans. Rochdale Lit. and Sci. Soc. III, 1891–92, and thus became available to those who could not read Swedish; but as publications of this sort are difficult to obtain and are apt soon to fall into oblivion, it is therefore desirable that they should be reprinted in a form suitable for libraries.

These essays may be regarded as "classics," as they were the first systematic studies of the decorative art of various primitive peoples, based upon an examination of specimens in most of the European museums and many thousands of rubbings and drawings made by the indefatigable author. Dr. Stolpe formulated certain general principles which have since been adopted with but little modification by all subsequent workers in this field, but the reader will note how cautious he was in drawing conclusions or in making suggestions. It is, however, inevitable that all pioneer efforts must be supplemented by later investigations. Dr. Stolpe made the most of the material then available, but during the last forty years museums have been enormously enriched by collections from the areas studied by Dr. Stolpe and there has been a corresponding extension of investigation by study in the field and at home. Dr. Stolpe discusses the problem of transformation, or degradation, as Read termed it, in the ornamental style of the Hervey Islands. It is not due to persistent copying of copies of unfamiliar originals, since the original types were quite as indigenous as the derived patterns; neither was it due to lack of skill, because the Herveyan carver often placed on the same implement the realistic prototype, as well as a whole series of intermediate forms down to those that are most transfigured; to conventionalise in order to save time could hardly enter the native mind. "The " perception of what would be the most " suitable decoration for any particular " space was, no doubt, well developed " amongst a people so far advanced in " technical skill. A desire to display as " many images as possible of the god in

" question is unmistakable. Moreover,

"an inclination to symbolism always obtains in mystic religions. My opinion still is that the conventional ornamentation of these peoples is to be considered as the very beginning of writing, or rather as a kind of pictograph, possessing fixed means of expression . . . no doubt it was fully known and understood by the 'sacred men' who executed it."

This is the first English translation of the second essay, which was published as Studier i Amerikansk Ornamentik in Stockholm in 1896. One portion of the text deals with Eskimo art, and the other with that of various tribes of North America. To this essay was appended a sumptuous atlas illustrating certain aspects of South American decorative art. In the chapter on the Eskimo especial attention is given to the art of the Angmagsalik of the east coast of Greenland, who till 1883 had never been in direct contact with the civilized world; the characteristic feature of their art is the zoomorph in one of the lowest stages of development; they also have the simplest tattooing. That of the Alaskan Eskimo is more elaborate, they in this and other matters, betraying influences from northern Asia. In the second chapter Dr. Stolpe says: "Where picture writing " appears, ornamentation generally stands " low, or has but limited application . . . " In all ornamentation some meaning " has originally lain, and with people who " have no script its lack has to be supplied "by ornamentation. But immediately picture writing appears, the compara-" tively feeble substitute is superseded . . . "I speak here exclusively of savage

"peoples."
These essays are abundantly illustrated with excellent figures. The atlas consists of twenty large and beautiful plates illustrating the designs on 146 clubs from Brazil and Guiana, and on other objects; the text is merely a simple explanation of the objects, the data thus provided affording material for further study. An admirable foreword has appropriately been written by Henry Balfour, and I would like to associate myself in his appreciation of one who was an inspiration to both of us and "a valued friend."

A. C. HADDON.

Art. von den Steinen.
Die Marquesaner und ihre Kunst:
Studien über die Entwicklung primi-

tiver Südseeornamentik nach eigenen. Reiseergebnissen und dem Material der Museen. Band II, Plastik; mit einer Einleitung über die materielle Kultur "und einem Anhang ethnographische Ergängungen," with 273 illustrations. Band III; Dic Sammlungen. By Karl von den Steinen. Berlin, 1928. D. Reimer. Pp. 292 and

atlas, 17 plates.

Certain features of the ethnography of the Marquesas have, for a long time, interested ethnologists, as they showed peculiarities that distinguished them from other Polynesian groups, but until recently the islands have received but little detailed attention. Thanks, however, to the sumptuous publications of Dr. Karl von den Steinen and the activities directed by the Bernice P. Bishop Museum of Honolulu, we now have as much information about the material culture and decorative art of the Marquesans as we are likely to obtain.

Volume III is a large-sized volume of illustrations with descriptions. Volume II of von den Steinen's masterly work deals with material culture and more especially with decorative art and contains such a wealth of information that it is impossible to summarise it. We find, among other matters, information concerning costume and the ornamentation of the person. The sacred red feathers, kua, were apparently from a red parrot, now extinct, but in the Hervey Islands the red feathers sacred to the gods were the two long tail feathers from the tropic bird. Various turtleshell and pearlshell ornaments are figured and described, the ear-plugs were especially varied. Those of bone and sperm-whale teeth have carved human figures which are described and fully illustrated. teeth of the sperm-whale are greatly prized. When on one occasion the Marquesans obtained elephant ivory they carved it into the form of these teeth as ornaments, but they were worn only by persons of low rank. The true whale's teeth might only be worn by persons of rank and wealth. The structure of the houses gives the impression of a house longitudinally bisected and somewhat resembles a reading desk, the absent half being replaced by a very steeply inclined roof. Each house is on a stone platform which extends as a terrace in front. The pile construction of the men's houses suggests that these are vestiges of an old culture of Melanesian affinity, as do many features of the decora-tive art in general. The water craft consist of bamboo rafts, outrigger canoes and double canoes, but boats of European type are also employed. In the canoes figured, the attachments of the float to the booms of the outrigger consist of several pairs of sticks which cross over the two, or three, booms; there is sometimes a small spar over the crossings which is lashed to the boom and tied by a cord to the float; the end of the boom may also be tied to the float by a cord. Other forms of attachments have been noted for the Marquesas

but this crossed stick attachment is not characteristic of Polynesia. The names are given of 32 string figures, of which five are illustrated, but no description is given of how they are made. Two illustrations are given of previously published skull-trophies, one being provided with boar's tusks, which remind one of analogous objects from the West Pacific. Among the most characteristic artefacts of the Marquesans are the magnificent wooden clubs, uu; no old ones now remain in the islands. The modern clubs are of lighter wood, smaller, and not at all so well carved. They were used both for fighting and when dancing. The decoration of these clubs is given in great detail and illustrated by a great number of beautiful photographs, together with rubbings and sketches of details. It is now possible for any curator to identify the designs on any club in his museum if, perchance, he does not find it figured here. These two volumes provide so many excellent illustrations of Marquesan ethnography, and especially of decorative art, that they are invaluable for all students of Polynesian culture.

The following publications by the Bernice P. Bishop Museum of Honolulu naturally to some extent coincide with von den Steinen's work, but they are the result of independent investigations and thus form a most useful complementary series, and in certain respects the investigators went into greater detail than von den Steinen

was able to do.

"Tattooing in the Marquesas," by W. C.

Handy. Bull. 1, 1922.

"The Material Culture of the Marquesas Islands," by R. Linton. Mem. VIII, No. 5, 1923.

"Polynesian Decorative Designs" (Marquesas, pp. 4–31), by Ruth H. Greiner. Bull. 7, 1923.

"The Native Culture in the Marquesas,"

by E. S. C. Handy, Bull. 9, 1923.

"Marquesan Somatology, with comparative notes on Samoa and Tonga," by L. R. Sullivan. Mem. IX, No. 2, 1923.

"Music in the Marquesas Islands," by E. S. C. Handy and Jane L. Winne. Bull. 17, 1925.

"String Figures from the Marquesas and Society Islands," by W. C. Handy. Bull. 18, 1925.

"Archæology of the Marquesas Islands," by R. Linton. Bull. 23, 1925.

A. C. HADDON.

Cyprus: Archæology. Gjerstad. Studies on Prehistoric Cyprus. 119 By Einar Gjerstad. Pp. 341. Upp. sala, 1926.

All students must be grateful to Dr. Gjerstad both for his own original work

on the field and for gathering together and arranging systematically a mass of very important material much of which was previously very badly published or unpublished. English readers will appreciate his valiant attempt to present the work in our notoriously difficult idiom. Apart from easily interpreted mistakes which demand no apology, they should note that he uses "tholos tomb" to denote a bell-shaped pit-grave entered from above, rather than the built beehive structure to which the term is usually applied in English, German and Greek. Among the new contributions we may draw attention, first, to the houses and fort that the author himself excavated and publishes, thus revealing a hitherto unknown aspect of Cypriote life. The discovery of a camel's skeleton in an Early Bronze Age tomb (69) at Katydhata is also most important in view of the recent discussions of the date at which the beast was introduced into Syria and North Africa.

Dr. Gjerstad's chief achievement, however, is to give greater precision to the tripartite division of the Cypriote bronze age outlined thirty years ago by Myres and Ohnefalsch-Richter; in place thereof he offers us a ninefold division on the plan of Evans' Minoan chronology. This scheme is based, as far as the first two main divisions are concerned, upon ceramic sequences obtained by his own excavations in the island. Tomb groups are adduced to supplement the data thus obtained and to bring within the scheme bronzes and other non-ceramic types. The establishment of the sequence presupposes a minute analysis of the pottery. The main varieties identified by earlier investigators are minutely subdivided. Thus we have four kinds of "red polished ware" and five of "white painted ware," in addition to "white slip ware." It must be confessed that, from the descriptions, it is not easy to distinguish the several varieties from a purely technical standpoint, although differences of shape and ornament are more easily recognised.

There can be no doubt that the new scheme is a great advance and will materially assist further studies. At the same time it must be regarded as provisional and subject to correction in the light of subsequent researches. Too much reliance must not be placed on purely typological considerations. Thus Gjerstad's Early Cypriote I phase should be characterised by the presence of his Red Polished I ware, but actually this is never found apart from Red Polished II, and at Aspraji first appears in the middle strata, while the last-named ware alone occurs lower down.

One is thus left in doubt as to the individuality both of the period and of the fabric that should characterise it. We venture to insist on this provisional character of Dr. Gjerstad's conclusions, not with the idea of disparaging his work, but lest what is intended as a preliminary essay be interpreted by superficial readers as a final chronology of the Cypriote bronze age and all that it contains.

V. G. C.

Holland: Anthropology. Nyèssen. The Passing of the Frisians. By D. J. H. Nyèssen, The Hague: M.

Nijhoff. 1927. Pp. 295. Price 7.50 gld. The author has studied especially the coastal mounds region of north-east Holland, the Terp area, as he calls it, defining Friterpia as the Frisian portion and Groterpia as the portion in the province of Groningen. He believes that Prof. Bolk's well-known estimates of head form overemphasise the brachycephalic elements. The Friterpians were of old dolichocranic and chamæcranic, the Gromesocranic and orthocranic. Brachycephalic types have penetrated into the Terp area mainly through the towns and comprise already more than a fourth part of the population; there were already brachycephals in the southern Netherlands Neolithic times. Brachycephaly becomes more characteristic as one goes eastwards in the Terp country and the dolichocephalic Frisians are being superseded more and more.

The above presents the author's general conclusions and the last ones are probably very near the truth. One is sorry to see that Nyèssen takes averages to denote that Britain has an almost purely dolicho-cephalic population, but his occasional use of this idea does not vitiate his argument. The book contains many general reflections and leads one to suspect that its author is a little inclined to worship at the Nordic shrine. What would we not give for the replacement of a good deal of the discussion by a few tables of actual measurements and observations in which all the data taken on each individual would be gathered together and given as such. H. J. F.

Italy : Demography.

Pulle.

Italia, Genti e Favelle. Biblioteca di Scienze moderne, Nos. 97-98. IZI By F. L. Pulle. Torino : Flli. Bocca, 1927. Atlas of 60 pl., and 2 vols (3 parts), in all, Pp. 970.

The text is essentially an accompaniment to the maps, which are interesting but of unequal value. The pre-Roman finds are concentrated on one map (in 2 plates) and thus do not show the interest of

early culture in Italy, whereas a plate is given to a very hypothetical reconstruction of late Pliocene Italy. It is evident that the Roman period is of great interest to the author and he maps a good number of phonetic, linguistic and dialectal features. The anthropological section is a large one, and well done, and it is supplemented by skull diagrams and type photographs. One map of pathological distributions is given and then follow rather curious maps, of criminality and litigiousness, of intellectual characters, and of military spirit and the blood sacrifice of 1914–18. An unfortunate appendix gives maps of the upper Adige and of Dalmatia in which, and in the explanatory text, the cloven hoof of the politician is seen trampling on the truth. Apparently it is as difficult for many of our Italian colleagues to put the case for the people of the upper Adige as it is for most of us in England to put the case for our neighbours in South Ireland. The cephalic indices are given for the Mandamento and thus have more value than if they were for larger divisions. The increase of natality as one goes from Piedmont to Venezia on the one hand or down the peninsula on the other is very marked and the contrast between the north-east, with its prevalence of pellagra, and the lowlands of Latium, the south, and the islands, where malaria is a scourge, is strongly marked. Homicide is far more prevalent on the Tyrrhenian side from Latium southward and in Sicily and Sardinia than it is along the eastern side or in the north, and the population of Southern Italy is far more litigious, but the proportion of illegitimate births is greater in the north. Apparently the south is more musical, the north naturally specialised in painting.

Science. Singer.

From Magic to Science; Essays on the Scientific Twilight. By Charles Singer. London: Ernest Benn, Ltd., 1928. Svo. Pp. xix + 253. 14 coloured

plates and 108 illustrations.

Dr. Charles Singer has collected and re-edited seven studies in the history of science that have, in various forms, been published before. As many of them are now out of print and difficult to obtain in their original forms, the reader will be grateful for their new appearance in the handsome and sumptuous volume now before us. The longest essay in the collection is that which deals with science under the Roman Empire, and this comprises every sphere of mental activity that can be brought within the term "science": most of the rest of the book is concerned with medicine, astrology and

philosophy, the greater part of which would be more appropriately called " pseudo-science." Dr. Singer's wide knowledge of classical and post-classical medicine is, of course, well known, and there is no need in this place to discuss the various topics that he has placed before his readers in so attractive and literary a form. The emergence of science from the magical lore of the Dark Ages. the evolution of the herbal, the philosophy of Hildegard of Bingen, and the legends that gathered around the famous medical school of Salerno are amongst the most interesting features of the book. Dr. Singer has collected a large and very striking series of illustrations. Most of these are from rare manuscript sources and are now published for the first time. and their material reproduction, whether in colour or monochrome, is beyond all

In view of the highly important and interesting nature of the subjects dealt with by Dr. Singer, there are two features conspicuously lacking in this volume. In the first place, the index is confined to names only, and does not include subjects; the value of this volume as a work of reference would have been greatly enhanced by a fuller index. In the second place, there are not sufficient bibliographical references in the book. Dr. Singer must not forget that, whilst the literature of early science is so familiar to him that no guide or aid to memory is necessary to himself, his readers are not in this happy position, and the student of medical history who wishes to follow up this or that aspect of the subject in greater detail has not been provided with the

WARREN R. DAWSON.

Mediterranean: Prehistory. Sergi.

apparatus for doing so.

Le prime e le più antiche Civiltà.

Bibl. di Scienze moderna No. 89.

By G. Sergi. Torino: Flli. Bocca, 1926.

Pp. 332.

This is a popular summary of the origins of Mediterranean culture, the region being visualised by the author as the melting pot wherein contributions from Europe, Asia and Africa fused to form the greatest things in human history. Sergi believes in tertiary man, accepts the Red Crag implements and thinks of the Mediterranean as the primary home of man. He appears not to support polyphyletic views as he was formerly inclined to do. His sharp criticism of biometrical errors in which large numbers of essentially heterogeneous elements are treated together will be welcomed in many quarters. For him still, as of old, the Mediterranean race

originated in some part of east-north-east Africa, and divided into four groups, which he calls Pelagi, Liguri, Iberi and Libi. He thinks that the Cro-Magnon and Combe Capelle types are widely separate, and uses the term Brown Race for the dolichocephals of Mediterranean, Semitic, Iranian and south Indian types, just as does Elliot Smith.

For the rest, his book is a rapid sketch of races, peoples, languages as he thinks they have developed in the Mediterranean and he continues his outline sketch right up to classical times. His work is that of a palæontological systematist with a very generalised acquaintance with archæology, but there are many comments that make the book worth reading.

CORRESPONDENCE.

Sociology.

Unwin.

The Classificatory System of Relationship. 124 To the Editor of MAN-

-As one who has travelled among uncivilised peoples, and who is now engaged in research in social anthropology, I am naturally keenly interested in everything which Mrs. Seligmann writes. This was particularly the case with her article on Incest and Des-cent in J.R.A.I., LIX, 1929, pp. 231 seq. But her "brief explanation" of the classi-

ficatory system of relationship cannot, surely, be accepted without demur. "A child," she says, "uses the term 'mother,' not only to "his own mother, but to his mother's sisters, "not only to the true sisters of the mother, but to those she calls 'sister'." And Mrs. Seligmann's hypotheses concerning exogamy and incest would appear to rest on the foundation that the term which we translate "mother," after being originally applied only to the creating female, was afterwards extended to other women of her age and generation.

But, in those cases where a child confuses a mother and her clan-sisters, does he use any

term at all which we can legitimately translate mother"? The very translation may introduce into the native word notions which do not really belong to it. The child does not distinguish between the woman who bore him and other women of her age and generation and social group. But there seems to be a complete lack of evidence that the term employed denotes any physical relationship. The Akamba are a case in point. It is clear that the word which is translated "mother" is merely "an honourable appellation given to "every elderly woman," and this is borne out by the fact that one name for maternal uncle is "male mother." (G. Lindblom, "The Akamba," pp. 100, 575.)

No satisfactory method of rendering native terms into English seems yet to have been evolved. Perhaps Morgan, all unwittingly, put us on the wrong track from the first.

Yours faithfully,

JOSEPH D. UNWIN.

Note.-By a regrettable inadvertence, MAN, 1929, 107, was attributed to "Reginald Parry. The author of the letter was Lord Raglan .- ED.

ANTHROPOLOGICAL NOTES.

Azande Folklore

Torday. Tule, the henous, tragi-comical Sangbwa Tule. mischievous, necked. hero of this delightful cycle of Zande legends, has been described by de Calonne-Beaufaict's literary executor (Betrand), as a culture hero; the equal of Mboli*, whereas Mgr. Lagae assigns to him the role of the Zande Till Uylenspiegel.† The stories published certainly support rather the latter view. Neither of these authors, however, mentions that tule is the Zande word for "spider,"; a fact which naturally reminds one of a very old friend in African folklore. Of course, Tule has travelled far and wide and may have lost something of his original West African character as he conquered tribe after tribe in the wake of Zande expansion; by force of repetition his legends may now be taken more seriously than in the old days when they were told simply for amusement. The objection may also be raised that Tule is always referred to by the masculine personal gender and not by the animal one; but this appears to be a common practice whenever an animal is personified in a story.§ "In legends when animals are made to speak, the use of the masculine and " feminine gender is common." culture hero dies, he dies for good, but African animal heroes seem to be endowed with

innumerable lives. Tule manages to die several times and by this probably puzzles Zande boys as much as Brer Rabbit's resurrection intrigued Uncle Remus's little friend. Like all the heroes of African animal stories, Tule is "as saucy as a jay-bird" and the Azande describe him as "ira sawiya nga kù," translated by Mgr. Lagae as "un monsieur qui "fait de sa poire,"¶ which may be rendered in English slang as "a fellow who swanks." And that is exactly what Spiders, and Brer Rabbits, always do.

Without attaching an exaggerated significance to the matter, it is worth noting that the hero of a similar series of Manbetu legends is Azapane, a word meaning "spider's web,"** and that the equivalent of Tule among the Ababua, Mba, is credited with having woven the universe on his loom."†† E. TORDAY.

Notre Colnie, Oct. 1920, p. 12.

† Mgr. Lagae, Les Azande, p. 72. ‡ Lagae and Vanden Plas, La Langue Azande, III, 154.

§ Ibid., I, 238. | Ibid., I, 207.

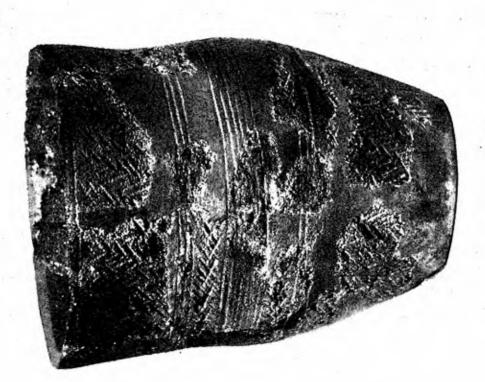
¶ 101a., 1, 201.
¶ Mgr. Lagae, op. cit., p. 73.
** A. Vekens, La Langue des Makere, des Medje, et des Mangbetu, p. 123.
†† A. de Calonne Beaufaict, in Mouv.

Sociologique International, Vol. x, p. 397.



B





BEAKERS FROM A CAIRN AT KRAIKNISH, ISLE OF SKYE. (x j).

ORIGINAL ARTICLES. With Plate K.

Britain : Archæology.

Scott.

Discovery of Beakers in a Cairn at Kraiknish, Loch Eynort, Isle of Skye. By W. Lindsay Scott. With Plate K.

This cairn is described as follows in the Inventory of the Royal Commission on the Historical Monuments of Scotland, "Ninth Report. The Outer Hebrides, " Skye and the Small Isles," Edinburgh, 1928:—

"492. Cairn, Chambered (?), Loch Eynort.-On a small plateau on the steep south-" western slope of Coille Grula, about 1 mile east-north-east of Kraiknish and about 200 yards " from the eastern shore of Loch Eynort, at an elevation of about 150 feet above sea-level, " are the remains of a cairn. It is circular and now measures some 27 feet in diameter and " 4 feet in height. The cairn seems to have been reduced in size, as the cover stone of a " central chamber has been laid bare. This slab of irregular shape measures 5 feet 6 inches " in length, 3 feet in breadth and 1 foot in thickness. The interior of the chamber beneath " is exposed by a gap in the building underneath the north side of the cover and is seen to be " circular, measuring about 4 feet in diameter above the debris with which it is more than half "full. The wall of the chamber is composed of drystone building, no upright slabs being " noticeable, and it is of beehive shape. There is no trace of an entrance passage. Skye XLIII (unnoted). 15th May, 1915."

2. The chamber of this cairn was excavated in 1929. Working from the constricted opening in the north side mentioned above, it was not possible to remove the whole surface of the contents of the chamber in one operation and a vertical section was made, about a third of the northern corner of the chamber being cleared layer by layer to the floor. When this was completed the remainder of the chamber was similarly cleared, working from the already cleared area.

3. The chamber was found to be filled with earth and stones to within 15 inches of the cover stone. On the top were a crow's nest and great numbers of bones brought there by the crow and other animals. Under this was a layer of about I foot of peaty earth, bracken roots and fallen stones. Below this was a layer of about 6 inches of blackened and apparently burned matter containing fragments of charcoal and a number of fallen stones. Below this was a layer of some 9 inches of red brown earth free of fallen stones. Throughout the whole were waterworn pebbles between 1 to 3 inches in greatest dimension; these were far the most common in the lowest layer and the floor was practically covered with them.

4. In the lowest layer the following objects were found. Scattered about the northern corner of the chamber were the fragments of the beaker A. In the middle of the north-western side of the chamber the beaker B was lying on its side complete, except for a small hole in its supper surface, although cracked by the weight of earth and stones above it. A large fragment of beaker A was wedged between the base of beaker B and the north-east wall of the chamber. Beaker B was tightly wedged in with water-worn pebbles around and below it; inside it was earth and the fragments of pottery corresponding to the small hole already noted in its upper surface. Near this beaker a tiny flint button-scraper (L. 0.7 inch) was found, but there was no trace of human bones in the chamber.

The two beakers, which have been restored at the British Museum,* are

illustrated in Plate K; they are :-

A. Beaker (restored) of thick gritty paste, light brown with black core; flat base, tall, slightly rounded body, faintly constricted neck, short upright rim with lip bevelled inside; whole of exterior ornamented, broad belt of irregular chevrons on body and rim with narrow cross-

^{*} I am greatly indebted for advice and assistance in the preparation of this note to Mr. T. D. Kendrick, of the British Museum, to whom, in particular, is due the descriptions of the beakers.

hatched zones on neck and shoulder separated by bands of horizontal lines; chevrons in upper and lower belts executed by notched or toothed implement, rest of ornament by blunt point.

Ht. 8 inches.

B. Beaker (almost complete, but repaired) of similar paste; exterior a duller brown and interior blackened on one side; flat base with distinct foot, short rounded body with constricted neck and tall bulging rim curving inwards to lip that is only faintly bevelled inside; ornamented on body and rim by broad zones of open lozenge-pattern, executed by notched implement, the lower zone having no margin below and finishing in short double strokes hanging vertically; three smooth horizontal lines separate zones at neck and a belt of similar lines bounds upper zone at top rim; slanting incisions on outer edge of lip.
Ht. 7·2 inches.

These two beakers are now in the possession of the author.

5. The chamber when excavated was found to be pentagonal and formed by six vertical slabs, all of which rose to a height of about 2 feet from the floor. They fitted neatly together at the joints and, except for that on the north-east side

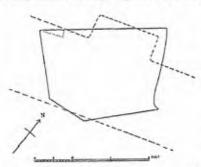


Fig. 1. Plan of Chamber, Kraiknish Cairn.

[The dashed lines indicate the approximate size and position of the cover stone; the pecked lines that of the upper edge of the inward tilted slab at the west corner of the cist.]

which bowed inward, they had flat inner faces. The narrow slab, 8 inches in width, which had been used to complete the north-west side was tilted inwards, apparently under the pressure of the earth behind it. The floor of the chamber was composed of small slabs of irregular shape neatly fitted together at their joints, though not quite even in level. The interstices between these slabs were filled with small, water-worn pebbles. The height of the chamber from the floor to the under side of the cover stone varied from 3 ft. 6 inches to 3 ft. 8 inches.

6. The wall of the chamber above the level of the slabs was composed of rough dry stone building set back at varying distances from the slabs of the cist. As stated by the Royal Commissioners this walling follows very roughly

a circle of about 4 feet diameter, but as part of it has apparently fallen into the cist it is not possible to say what was its original shape; it may have followed the shape of the cist. The cover stone, which lay east-north-east and west-south-west, rested on the walling at its eastern end, but at the western end was corbelled out from the wall on two superimposed slabs. Apart from this there is no sign of beehive roofing. As is shown on the attached plan, the cover stone almost completely covered the cist. On the southern side of the cover stone the roof appears to have been completed by a smaller slab which is now tilted into a nearly vertical position. On its northern side no complete slab now exists but broken pieces seemed to indicate that on that side also the roof had been completed by one or more slabs.

W. LINDSAY SCOTT.

Africa, South : Archæology.

Goodwin.

A New Stone Implement Technique from Natal. By A. J. H. 127 Goodwin, M.A.

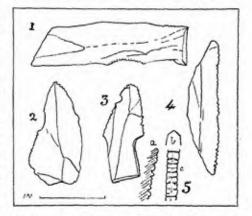
Mr. W. E. Jones of Mfongosi, Natal, has submitted a collection of over thirty stone implements to the writer from a site in that district. In form, these are directly comparable with the material from Glen Grey Falls described by Burkitt ("South Africa's Past in Stone and Paint." Cambridge, 1928) and show Mousterian affinities. The material is a hard indurated shale which has oxidised to some extent to produce grey to brown shades of patina.

The interest of these implements lies in a peculiar technique, hitherto unknown in this country and, I believe, elsewhere. It consists, in the making, of a saw-like edge by means of a series of cuts, apparently incised with another tool or graver of stone, from either or both faces and at right angles to the edge of the flake. These cuts measure perhaps a millimetre in length, and are spaced at a similar distance one from the other, the depth is slight, and the effect recalls the graded edge of a millimetre ruler.

Where this technique is used on both faces the grooves meet over the edge and coincide fairly well, though not absolutely, to give a slightly serrated edge which weathers down to much the form seen on the cord of the lunate shown (Fig. 4).

one end of which has been enlarged in silhouette and shaded (Fig. 5a), while a short section from Figure 1 has been enlarged both in section (5b) and as an edge elevation (5c).

In Fig. 1 a flake with a slight encoche has been treated in this manner along the concave portion of the edge, and also along the entire opposite edge on the reverse face. Fig. 2 shows a point similarly treated, mainly towards the apex. Fig. 3 shows an interesting point, apparently tanged by the removal of two burin-like flakes from the butt end. That this technique was understood is evident



from the presence of a very fine specimen of the true burin. This latter is well made and definite, but shows no signs of the peculiar treatment visible in the specimens shown.

A further point of interest is that a number of flakes which would normally be rejected as discards from other sites of this industry have also been subjected to this treatment. Some of these measure 5 mm. across and are of similar length, having a maximum thickness of perhaps a millimetre; these have weathered considerably, but the serrated edge is very marked. The position of the serrations relative to the shape of the implements is often peculiar, and bears little relationship to any implied usage. For example, a well-made lance head has the saw-edging cut on the under (cleavage) face only, but insufficiently to produce actual serrations along the edge of the implement; other flakes appear showing the saw edge at awkward spots, and indeed, few show the appropriateness of the saw-edge shown in Fig. 1.

The implements and the site itself will, it is hoped, be fully described in the Annals of the Royal Society of South Africa at some future date.

Congo: Technology.

Maes.

Un Tam-Tam d'Initiation du Haut Kwilu. Par M. le Docleur J. Maes, Musée du Congo, Terveuren.

Dans notre étude "Aniota Kifwebe" nous avons eu l'occasion de signaler que parmi le matériel des rites et cérémonies de la circoncision, il convenait de classer certains grelots en bois, symbolisant très souvent une tortue. Mr. Maréchal, administrateur territoriale qui séjourna pendant longtemps dans la région du haut Kwilu, fit don au Musée d'une superbe collection de photographies se rapportant aux cérémonies de l'initiation et de la circoncision des Babunda et Bathok, Bathoko (Kioko). Il signale parmi le matériel des rites de la circoncision, un petit tam-tam dont le maître initiateur se sert pendant l'opération de la circoncision. Récemment Mr. Schoep, professeur à l'Université de Gand, eut l'heureuse occasion d'acquérir un de ces tam-tam de l'initiation (Figs. 1 and 2), qui doit à notre avis être classé parmi les pièces les plus rares et les plus soignées de cette série. Découpé dans un



Fig. 1.

TAM-TAM DE L'INKIMBA

VUE DE FACE.

RÉGION DU HAUT RWILU.

COLL., MR. SCHOEP.

seul bloc de bois le tam-tam présente la forme d'une pétite pirogue de 40 ctm. de long, 10 ctm. de large et 15 ctm. de haut, muni à la surface supérieure d'une ouverture longitudinale de 35 ctm. de long et 2 ctm. de large, dont les bords sont ornés de deux bandes de dessins linéaires. sculptés en petit relief et entrecroisés en bandes d'un effet esthétique très remarquable. Ce petit tam-tam présente à la partie dorsale une décoration artistique du plus haut intérêt, formée par une figure humaine sculptée en relief. La coiffure en est formée par l'entrelacement d'une large bande de fines moulures linéaires, dont le dessin pourrait bien être une variante du motif décoratif "Imbolo" des Bakuba tout en stylisant d'une façon frappante et très ingénieuse la coiffure des Babunda du Haut Kwilu. Dans toute la largeur du front s'étend une ligne de petits points, stylisation probable d'une figure de tatouage dont on peut d'ailleurs retrouver les symboles dans lesdessins gravés des joues et du menton. Les yeux sont creusés en profondeur, le milieu du front est sculpté en fort relief et orné de deux lignes parallèles. La racine du nez est percée d'une petite ouverture où passe la cordelette à laquelle s'attache le petit bâton servant à frapper le tam-tam.

Comme nous le disions plus haut ces tamtam sont réservés au grand maître du Nkanda et utilisés lors de la circoncision. Le maître initiateur s'en sert également lors de sa tournée dans la région pour annoncer son arrivée et inviter les futurs circoncis à se rassembler. D'après Mr. Maréchal, la circoncision a lieu immédiatement après l'installation du village du Nkanda. A leur arrivée dans la forêt ou à l'endroit choisi

par le grand maître de la circoncision, pour célébrer les rites de l'initiation, les jeunes gens doivent construire les huttes et cloturer le village. La première installation terminée on organise au village une grande fête accompagnée de danses et chants et de larges libations. De temps à autre les réjouissances sont interrompues. Le tam-tam du grand maître de la circoncision a résonné, un nouveau néophyte se sépare du groupe et s'en va dans la hutte de la circoncision pour y subir l'opération. Celle-ci se fait en présence de quatre aides. Le jeune homme assis à terra écarte largement les jambes que deux aides maintiennent solidement en place. Le troisième se place derrière le candidat en enlaçant fermement les bras de façon à immobiliser le buste. L'opérateur armé de son couteau à lame bien aiguisée,

accroupit devant le jeune homme, pratique l'opération, tandis que le quatrième aide bat furieusement le tambour, chante au plus fort de façon à étouffer les cris du nouveau circoncis. La blessure est sommairement pansée et le nouveau circoncis envoyé dans l'enclos qui leur est réservé.

Une fois tous réunis les "Danzi" ou nouveaux circoncis ne peuvent se revêtir que d'une ceinture en fibres de raphia. Il leur est strictement interdit d'entrer en

rapport avec une femme ou un non circoncis. Lors de leurs déplacements en dehors de leur enclos, ils doivent signaler leur arrivée ou leur présence en sonnant du "Bundabunda," genre de trompe faite à l'aide d'un bambou creux. Pendant toute la durée de la retraite chaque "Danzi" reçoit journellement sa nourriture d'un indigène du village qu'il appelera "Tata."

Lorsque toutes les blessures sont guéries, le grand maître de l'initiation fait annoncer le retour des "Danzi." Aussitôt les indigènes organisent la réception. Les femmes préparent le grand repas, les hommes rassemblent quantité de calebasses de vin et les jeunes filles nubiles se parent de leurs bijoux, s'enduisent de ngula et se rendent belles pour recevoir les "Danzi," les nouveaux mâles.

Cependant au village des "Danzi" tout Les nouveaux circoncis est en mouvement. sont lavés par les aides du grand maître de la Leur costume en raphia est circoncision. remplacé par un morceau d'étoffe tissée, enduite de ngula et de mpembe. Ils se coiffent d'un masque surmonté d'une figurine animale le "Rakasa" ou taureau, symbole et esprit de la virilité que seule le "Danzi" devenu homme peut porter ce jour. Avant de quitter l'enclos de l'Inkimba les "Danzi" mettent le feu aux huttes et veillent à ce que tout ce qui à été utilisé pendant l'initiation soit détruit par le feu.

Puis le cortège précédé par le grand maître de l'initiation sonnant du petit tamtam, suivi des "Danzi" et fermé par les aides de l'initiateur, se met en route vers le



TAM-TAM DE L'INKIMBA VUE DE DOS. RÉGION DE HAUT KWILU. COLL., MR. SCHOEP.

village. La réception se fait au milieu des manifestations les plus diverses et les plus bruyantes. On chante, on danse, on boit et la fête dure bien tard dans la nuit. Les "Danzi" pour bien montrer qu'ils ont rompus avec l'enfance et ont abandonné leur premier nom, pour prendre le zina na Mukanda ou nom de la circoncision que le grand maître du Nkanda leur a donné lors des rites et cérémonies de l'initiation.

J. MAES.

Arabia: Religion.

Cline.

"El 'Azl": Shame-compulsion in the Yemen. By Walter Cline.

Last spring, while in Aden, Mukalla, and Shihr, on the southern coast of Arabia, I learned of some Arab social usages which, I believe, have not yet been

published. One of these is a Yemeni form of shame-compulsion (el azl—'ain, zal, lam), embodying some of the most important motives in Arab life.

When a man in a quarrel or feud stands in mortal need of assistance, he takes his rifle, his dagger, an animal—such as a sheep or a goat—for ceremonial slaughter, and his daughter or wife, to the dwelling of the person from whom he seeks help. Having cut the throat of the animal before the door, he fires his gun into the air and, when a crowd has gathered, lays his wife or daughter on the ground, with her head resting on the slaughtered body, and declares in formal language his abject dependence on the master of the house, presenting the woman as a guest. The host then helps her to her feet, saying to the suppliant: "I have given my protection." The principals and the people of the village enter the host's house and enjoy a feast at his expense. Only the servants, however, eat the animal formally killed by the suppliant.

The critical point is to take the host by surprise, slaying the animal at his door before he can refuse protection. This is sometimes done successfully by a murderer, compelling the relatives of his victim to grant him an amnesty. In this case such amnesty is limited to a period of months, giving the murderer time to flee from the

territory, or his tribesmen time to plead for mercy in his behalf.

Since this practice brings disgrace on the suppliant—especially in placing one of his womenfolk publicly under another man's care—it is dreaded as a great 'aib, "shame," and performed only as a last resort. A far more terrible infamy, nevertheless, would brand the man who refused to grant protection under these circumstances, or who, having taken the unfortunate in, betrayed him.

Though only one example of the many types of shame-compulsion in Arabia and North Africa, this combines in a significant way such elements as "blood-"sacrifice," the Arab's attitude toward women, and obligatory hospitality.

WALTER CLINE.

India: Technology.

Codrington.

Ancient Indian Hand-Mirrors. By K. de B. Codrington.

On one of the Bharhut-Stupa railing-pillars recently transferred to the Idu Indian Museum, Calcutta, from Sutna, Rewa State, Baghelkhand, is the figure of a woman holding a handled mirror [Arch. Survey Rep. 1925-26, Pl. LVIII]. On the Ajanta frescoes, circular mirrors without handles are often represented. In Cave II [Victoria and Albert Museum, (I.M. 42-'85) Griffith's copy, Vol. 1, Pl. 33] one of the two women seated in the little pavilion holds a mirror, as does the standing princess in Cave XVII [I.M. 99-'87, Vol. 1, Pl. 55]. Near the latter stands an attendant holding a tray with small pots of toilet preparations. In cave XVI [I.M. 77-'87, Vol. 1, Pl. 48], in a palace bedroom scene a circular mirror is represented as hanging by a cord from a small table on which there are more of the same toilet pots.

In the Archæological Survey Report 1902-03, in the list of finds from urnburials at Adittanallur, Tinnevelly District, five circular bronze "plaques" with projecting tangs or central bosses are described, one of each type being illustrated [Figs. 12 and 13, Nos. 294 and 577]. The first is described as "a flat moulded plaque, 5\frac{3}{4} in. in diameter, with flat triangular pointed handle, 1\frac{1}{2} in. long, projecting from the rim. Around the circumference is a broad flat bead moulding, with a small concentric bead outside and another inside it. The under side is flat; the upper slightly convex." In the separately published handbook to the Adittanallur finds, this object is identified as a frying-pan. The second object is 7 in. in diameter and has a "flat fillet" \frac{7}{8} in. broad round the rim, and a central "knob" encircled by a bead moulding. These objects, which are of bronze, can only be mirrors. It is surprising that others have not been found, especially in northern India.

The copper object from Basarh [Arch. Sur. Rep. 1903-04, Fig. 15], which has both handle and central boss, may be a mirror, but the reconstruction does not make it plain.

Both kinds of mirror are common in Java, some of them being highly decorated. These are also of bronze. [Kat. des Ethnographischen Reichsmuseums, Band V, pp. 165-177.] It is interesting to note that the Adittanallur bronze of high tin content is almost unique in India, being also found in the metal-work of the Nilgiri cairns and barrows. The great sites of this period, whatever its actual date may be, seem to be along the sea-coast. It is certain that the source of the tin must be looked for outside India.

The Bharhut sculptures may be dated 2nd century B.C. and the Ajanta frescoes 6th century A.D. The Adittanallur mirrors taken in conjunction with certain pottery forms and sword and hatchet types, may be tentatively taken as indications that the urn-burial culture cannot be divorced from the general culture of India made known to us at historical sites and by modern survivals.

K. DE B. CODRINGTON.

Language.

Raglan.

The Influence of Environment on Language. By Lord Raglan.

Every student of languages has probably noticed the difference between

Every student of languages has probably noticed the difference between the Italian and German forms of the place-names on the north-east frontier of Italy. To take three examples:—

Italian—Verona, Adige, Gorizia. German—Bern, Etsch, Görtz.

It will be observed that the consonantal sounds are practically the same, while Italian has ten vowel sounds to the German three.

Why is this? To say that it is in accordance with the genius of the two languages is merely to state the question in another form. Why does the genius of the two languages differ in this particular way?

In my studies of the Nilotic languages I observed a similar phenomenon. For

example :-

Lotuko-oyami, orogho, kiringu, angwan, kele-correspond to

Dinka-yom, araich, aring, ngwan, kwel.

It will be noticed that the Italian and Lotuko words end with a vowel, while the German and Dinka do not.

Now the Lotuko villages are nearly all situated at the top of rocky hills, and the people habitually converse from their doorways with their friends on the plain below. On the other hand the Dinkas, or Jang as they call themselves, live in the swampy forests of the Nile, and these long-distance conversations do not take place.

It seemed evident that the difference in form between the Lotuko and Dinka languages was due to these circumstances, and further consideration has led me to think that the principle can be extended and that languages can be divided into two classes, which may be called "shouting languages" and "non-shouting languages," according to whether the people who evolved them did or did not find long-distance conversation a necessity.

The following would seem to be the leading characteristics of shouting and

non-shouting languages :—

Shouting.

Spoken with mouth wide open.

Not tonic.

Polysyllabic.

Vowels more numerous than consonants.

Non-shouting.

Spoken with mouth half shut.

Tonic.

Monosyllabic.

Consonants more numerous than vowels.

Shouting.

Vowel sounds few and well-defined. Root vowels remain constant. Inflexion by added syllables. Non-shouting.

Vowel sounds numerous and ill-defined. No inflexion, or inflexion by change of root vowel.

If we apply these hypothetical tests to the languages of Europe, we find that both Greek and Latin are shouting languages, though the proportion of consonants is rather large. On the fall of the Roman Empire, various fates befell the Latin language. On the one hand, it retired to the Tuscan hills, where it became far more of a shouting language, while, on the other hand, in the woods of northern France, it acquired most of the characteristics of a non-shouting language.

The Germanic languages are non-shouting; less so in the case of Gothic and

High German, and more so in the case of Dutch and English.

The only non-Aryan language in Europe of which I have any knowledge is

Basque, emphatically a shouting language.

Chinese is a perfect example of a non-shouting language, while Japanese, from the little that I know of it, seems a good example of a shouting language.

Turkish and Persian I should be inclined to class as non-shouting, while Arabic is a shouting language, though less so in modern dialects than in its classical form.

Whether the theory here enunciated is capable of being carried farther, or even as far as I have carried it, requires a far greater knowledge of languages than I possess. Whether it is new I do not know, but in everything I have read on the subject it seems to be assumed that changes in language are due either to degeneracy or to foreign influence, whereas they are, it seems probable to me, due to and consequent on changes in the habits and environment of the people who speak them.

RAGLAN.

Africa, West: Religion.

Wilson-Haffenden.

Some Notes on Fork guards in Nigeria. By J. R. Wilson-Haffenden. 132

The notes on "fork-guards" by Mr. G. F. Pinfold (Man 1929, 76) tempt to offer some observations on "fork-guards" in Nigeria.

Mr. Pinfold states that the peculiar custom of wearing "fork-guards" appears to be confined to a few sub-tribes of the great Sara people inhabiting districts between Lake Chad and the Ubangi River. This area is, of course, contiguous to

Nigeria.

It is stated that the "fork-guards," which I gather from the article are intended to resemble the male organ, "are worn only by the married women in all cases." Also that "there is no doubt that the object is to deceive strangers, for on approaching a village, especially a European, the men tuck the whole of the genital organs between their thighs and walk thus."

Now, if the women, who walk about stark naked except for the fork-guards, expect to be mistaken for men by wearing the latter, I take off my hat to "Colonel Barker" every time. If, further, the men expect to be mistaken for women by waddling about with the genital organs tucked between the thighs, then they would appear to be more devoid of intelligence than the most primitive of the naked tribes in Nigeria.

I have alternative explanations for both these practices to offer, based on

analogous practices to be found in Nigeria.

There are many unclothed tribes in Nigeria whose married women (and married women only) wear sexual symbols hanging down on a level with the pudenda either in front or behind. For instance, the wives of the Kagoro inhabiting the Jemaa division of the Plateau Province, of which I was once in charge, wear a lumbar adornment, called "oyam," which is frequently smeared with red oil. At the

present day it resembles an inverted mushroom, but formerly, it is said, it consisted of the stalk only. Both the late Major Tremearne (in *The Tailed Head-Hunters of Nigeria* (Seeley Service & Co., 1914)) and Mr. Meek (in "The Katab and their Neighbours," in the *Journal of the African Society*, July 1928) have stated that they consider the "oyam" to have been phallic in origin. The object cannot in this case be to deceive, since the pudenda are visible in front, except in so far as they may be partially hidden by a bunch of leaves worn for the purpose of concealing them.

My view is that these phallic ornaments are intended as "fertility" or "good luck" charms, and in this connection one may observe that at the present day, or at least until recently, in Italy, peasant women wear imitation "phalli" suspended from necklaces to avert the "evil eye" and bring good luck.

As regards the custom of the males tucking the whole of the genital organs between their thighs, especially on approaching a European settlement, I cannot imagine how the motive of concealment of sex could possibly be operative in such circumstances. Of what advantage would it be to them if the Europeans mistook them for women?

In the circumstances one of the most prima facie probable explanations would appear to be that the action is intended as a form of salute and I think that plausible arguments can be adduced in support of this view.

A certain Resident (Provincial Commissioner), since retired, under whom I served in Northern Nigeria, was in the habit of relating his experiences of about twenty years ago among the Tangale tribesmen inhabiting the south-eastern corner of the Bauchi Province.

There were two peculiar customs of which he used to tell. The first was that, in addition to severing the heads of enemies slain in inter-village raids, they used to remove the genital organs: and from this I infer that the soul was associated by this tribe in a special sense with the genitals. Mr. Meek refers to this custom in *The Northern Tribes of Nigeria*, Vol. II, p. 52, when, quoting Mr. J. S. Hall of the Sudan Interior Mission, he says—with true Jixian regard for public morality but unfortunately with some scientific ambiguity—that the slayer on his return from the fight "exhibits in triumph part of the dead man's body—but never the head."

The second custom was that when he summoned village chiefs before him they used to micturate freely in his presence. The Resident had received no training in anthropology, and regarded the practice merely as beastly and probably indicative of their contempt for him.

It seems to me highly improbable, however, that natives but recently brought under partial control by military expeditions would go out of their way to show contempt to the representative of the conquering power, accompanied as he always was by an escort of armed police. Rather would they be likely to perform an elaborate salute and hypocritically protest their peaceful intentions. At least that is my experience in comparable circumstances.

Certain tribes in East Africa, for example the Wajagga, habitually spit as a form of salute and a sign of peace when making a covenant, and I understand that these tribes also associate the soul more particularly with the head. My argument is that it would appear as logical for a tribe associating the genital organs with the soul to micturate for the above purpose as it is for a tribe associating the soul with the head to spit.

The customary posture for micturition amongst most of the tribes with whom I have had dealings appears to be designed to prevent the genital organs being

observed to anyone standing in front of the performer. The posture described by Mr. Pinfold as adopted by the men of the Sara tribes on approaching a village, especially a European, would seem to serve a like purpose.

J. R. WILSON-HAFFENDEN.

REVIEWS.

Sarasin.

Melanesia.

Ethnologie der Neu-Caledonier und Loyalty-Insulaner mit einem Atlas. 133 By Dr. Fritz Sarasin. München: C. W. Kreidel's Verlag. 1929.

This magnificent work by Dr. Fritz Sarasin is based not only on his own observations and the collections made by him and presented to the Basel Museum, but it is also a compilation from the whole literature on New Caledonia and the Loyalty Islands, to which he gives innumerable references. It is thus a monograph which every student of Melanesia must consult and study. Every phase of native life is described and, where possible, illustrated in the atlas; the latter contains 73 plates of very clear and beautiful photographs which leave nothing to be desired. The specimens illustrated are mainly to be found in the Basel Museum, but a certain number belong to various other museums. It should be superfluous to remind anthropologists of the monumental work by the same author, with the collaboration of Dr. Jean Roux, Anthropologie der Neu-Caledonier und Loyalty-Insulaner (Berlin, 1916-1922), with its sumptuous atlas of 64 plates.

New Caledonia has been fortunate in attracting Dr. F. Sarasin to crown his long life of anthropological research by the publication of a masterly exposition of its inhabitants and ethnography. It should, however, be noted that Dr. Sarasin has not contented himself with mere descriptions, but has everywhere given distributions of the objects or customs in Oceania. It is to be regretted that no native names are given of the artefacts, since these frequently afford clues for drifts and migrations.

With all this multiplicity of information it is only possible to allude to a very few matters of interest. In the shell-mounds are found large stone implements of an archaic character, and the stone industry of New Caledonia is described as Neolithic with a still strong Palæolithic tradition. Dr. Sarasin considers as doubtful the statement by Macmillan Brown of the occurrence of dolmens or trilithons (Man, 1916, No. 66). Alignments, according to the natives, are war memorials, each stone representing a fallen and eaten foe, the largest being the chief. Fragments of pottery are found in the shell-heaps, thus

proving this to be an ancient art. At the present day, pottery is made by modelling, by the coil method, or, as Glaumont describes, by coating a coconut or gourd with clay. He, like others, regards this as the most primitive method, but Dr. Sarasin considers it to be a degeneration technique. Practically all the ancient and modern pots are decorated to some extent with simple incised patterns; occasionally representa-tions of human faces or figures are applied in relief. Dr. Sarasin, as others have done, has compared the characteristic round houses of New Caledonia with those of the eastern islands of Torres Straits, but whereas some have regarded the latter as indicating a migration or culture-influence from New Caledonia, he regards the movement as having taken the opposite direction. The material of the beautiful green stonebeads of New Caledonia is generally termed serpentine, jade, or nephrite; analysis shows it to be mineralogically a gabbroidal amphibolite.

Dr. Sarasin has collated and made the most of all the information that exists concerning the socio-religious life of the people, but, owing to the neglect of detailed and critical work by the few French investigators, the material is not so precise as could be desired. There are traces of totemism, but no totemic clans are specified. Unlike the matrilineal clan system of most of Melanesia, there are exogamous clans or family groups in which descent is patrilineal, but the father is not held in great respect, though the maternal uncle has great influence over his nephew. Inheritance of land devolves from the father, but weathermagic may be inherited from the father and Cross-cousin from the maternal uncle. marriage is the rule, but the children of two brothers or of two sisters (parallelcousins) may not marry; marriage within the village is also forbidden. Every student is familiar with the great wooden masks of New Caledonia, which some travellers call They certainly have nothing war-masks. to do with warfare; at the most, the dances (popularly termed pilu) might precede a declaration of war, and perhaps a masked man played a special part therein. It seems probable that the use of masks was confined to certain festivals-for example. they were worn in death-feasts. case the masks were worn only by certain. privileged persons. Magical stones play a great part in the life of the natives. The virtue of the stones results from the operation of the spirits of ancestors; such stones may be selected on account of their form or colour, or they may be indicated by an ancestor in a dream. Though the form of a stone may suggest to a casual observer that the effect is due to sympathetic magic yet the functioning of the stone is due to the influence of an ancestral spirit; scarcely ever is a stone rendered effective by an impersonal soul-stuff.

A. C. HADDON.

Pacific: Disease.

Buxton.

Researches in Polynesia and Melanesia: Human Diseases and Welfare. By Patrick A. Buxton. Pts. V-VII. London School of Hygiene and

Tropical Medicine.

The data were obtained in the course of an expedition to investigate certain questions in medical entomology arising out of which it proved necessary to ascertain the distribution in the community of certain blood parasites. In the course of the latter study notes were taken of the occurrence of various medical defects and ailments and their possible relation to hygienic changes which have taken place in the last century. The main research on the distribution and intensity of infection of the natives of various ages with microfilaria conveyed by the bites of infected mosquitoes is mainly of import to the tropical hygienist, but some side remarks are of more general interest. For example, the ancestors of the Polynesian no doubt brought with them the ancestors of the filaria from some part of south-east Asia, but in Asia the filaria are only found in peripheral circulation in any numbers at night, i.e., during the usual hours of sleep, while in Samoa the filaria are to be found in the peripheral circulation at all hours. This leads to an interesting discussion as to whether the change in the habits of the filaria is to be ascribed to the more irregular hours kept by Polynesians, who often sit up all night and sleep all the next day, or to the fact that the local vector, the Aedes rariegatus, bites in the morning and evening but The filaria not at night or midday. is scarce in certain atolls where the conditions of life are unfavourable to the mosquito population, which is now being diminished in the more advanced villages by the clearance of undergrowth and so the destruction of suitable breeding places. Incidentally it has been found that the frame houses used by most half castes as a sign of social advance, being darker

than the native houses, tend to favour the mosquito. A further section considers the diseases which arise from infestation with filaria. These diseases do not bear any close relation to the number of filaria in the blood of the patients, for by the time the diseases associated with filariasis have developed the original causes have often died. One observation suggests that human racial traits may be responsible for the differences noted with regard to diseases due to filaria in different parts of the tropics. A Chinaman was found suffering from a non-periodic filariasis which must therefore have been acquired in Polynesia and not in Asia, but his lesions were of the type common in China but unknown among the natives of the Pacific Islands.

The author has made a special study of yaws and syphilis in Samoa and some other islands, and concludes that whereas it is often stated that the islanders are severely infected with venereal disease supposedly imported from Europe, most of the cases are really yaws, which is not a venereal infection and was not introduced by Europeans. He regards the former view of the harm which has been done by the European as a misconception which is still widely prevalent in official and missionary circles and which should be dispelled if only for the sake of the self-respect of the European. Both diseases are due to a spirochæte, the one (syphilis) to the Treponema pallidum. the other (yaws) to the Treponema pertenue; but the mode of transmission of the latter may be through any breach in the surface of the skin. It is of some importance to note that the author regards yaws as conferring immunity against syphilis-a point which is much disputed by other observers. It has been found that intravenous injections of organic arsenical preparations rapidly cure yaws without doing away with the immunity one attack may have conferred.

With regard to tuberculosis, the author draws attention to two popular errorsthe first that the climate of Samoa is particularly favourable to phthisical patients, and the second that tuberculosis is the great scourge of Oceania and was introduced by the European. The present author thinks many enlarged glands in children due to yaws have been credited erroneously to tuberculosis and that neither tuberculous glands nor pulmonary tuberculosis are so prevalent as have been suggested. In the New Hebrides, on the other hand, it is pointed out that there is evidence that while villagers are almost free from infection by the tubercle bacillus, numbers become infected when they work on the white man's plantations. In Samoa, too, the type of house used by the half castes as a sign of social rise are much more dangerous from their darkness and lack of ventilation and are less effectively cleansed than are native houses. The same social conventions lead to the half castes and their progeny eating unsuitable tinned foods and wearing less suitable dresses, all of which tend in some measure to undermine their health.

In the study of the changes in hygienic arrangements which have accompanied the contact with the European it is shown how half-and-half measures are often a disadvantage. Some of the difficulties met with in introducing a medical and sanitary service arise from the disinclination of the native to regularity in any form of work, even when for his own benefit. For example, there has always been a high mortality in later infancy owing to the difficulty of getting suitable food once breast feeding ceased. The Infant Welfare service has done much in Samoa and it was thought the introduction of cattle, which are now common, would have got over the feeding difficulty by providing an adequate supply of milk; but it proved not to be the case. The people were too careless to milk the cows at regular intervals and the cattle are used almost for the sole purpose of keeping down weeds in coconut plantations and not as a source of milk. The author concludes that the influence of European culture upon the Samoan has been varied and irregular, that Samoa has suffered much less depopulation than other groups of islands, and that though the population of western Samoa may have fallen a third in the first half-century of European penetration it is now recovering its numbers though, perhaps, not to the extent they reached at the beginning of the nineteenth century. The Samoan is the Conservative of the Pacific and has retained more of the old life than Tongans, Maories or Tahitians.

F. C. SHRUBSALL.

Science.

Dawson.

Magician and Leech. By Warren 135 R. Dawson. Pp. x and 149, with six 136 illustrations. London: Methuen and Co., 1929. Price 7s. 6d.

The sub-title, "A study in the beginnings of medicine, with special reference to Ancient Egypt," gives an accurate summary of the contents of this most interesting book. It is short, but contains sufficient detail to illuminate the various points made by the author in carrying out his task of showing the origin of the leech's art through that of the magician.

Primitive man, refusing to accept death, believing it to be unnatural unless resulting from wounds, whether purposed or accidental, and so attributing it to the work of enemies, whether gods (perhaps, at least in Assyria, for a sin), or ghosts or wizards, turned eagerly to the magician or the priest, men of learning and power in these mysterious matters, for aid against the enemy. Many and complicated were the rites and spells used, the drugs, herbs and other components of an exoteric or, often, a disgusting nature; with the passage of time certain ingredients were found to be really effective and so attained to continuity of usage; it was the trying out of these, the separation of them from the merely hocus-pocus elements, that first gave rise to the true application of knowledge-in other words, to science-a stimulus existing in the knowledge of surgery and traumatic treatment. It is the history of this slow and confused process that our Fellow has here given, with details characteristic and well chosen, laying under a real obligation those-and they must be many -who are interested in the history of medicine. He has personally explored the ancient papyri and gives his own translations—possibly not always acceptable to some Egyptologists, but with all the advantages of acquaintance with previous studies; as he shows, translations published, in some cases, many years ago, passing from book to book, are still current and responsible for much erroneous thought; it is fortunate that, in this case, the student has to do with the results of technical knowledge combined with a grasp of medical matters rare in a layman.

The author, although his sources, found at the haphazard inseparable from such ancient remains, are unevenly distributed in time, has well observed historical sequence, a point of the first importance in dealing with all Egyptian matters, in which writers often ignore the changes and developments in religion, thought and method, that occurred there as well as in other civilized countries; it is indeed vexatious to be told, as we so often are, that the ancient Egyptians did, or believed, so-and-so, without any hint of the period, or even of the placefor the theology of various districts was influenced by local devotion to their principal divinities. But in one passage the author has forsaken this rule: the strange birth of Hu and Sia (pp. 9-10) is reported from chap. 17 of the "Book of the Dead," with the suggestion that we have here the source of the practice of circumcision; but these minor deities are personifications of "Commanding Utterance" and "Understanding" respectively, abstractions surely formulated in the human mind long after

the beginnings of circumcision.

Since, in the Egyptian's fight against mortality, the process of mummification is by far the most prominent of his weapons, the author has devoted to it a considerable proportion of his space; his previous studies in the subject, with Professor Elliot Smith, have well qualified him for the work. His account of the origin, meaning and development of the art is orderly and clear, and full of interest for the general reader as for the student. A chapter, based largely on Dr. R. Campbell Thomson's researches, is devoted to Assyrian magic, the resemblance of which to the Egyptian is in many points remarkable and strengthens the thesis, now gaining the attention of students, that an early common culture underlies the development of civilization in each country.

A final chapter gives some account of the survival of certain old magical practices to modern days; one of them, the giving of mice to children as medicine, is still alive after a career of sixty centuries; this chapter is as striking as any of the others and, equally with them, will afford the reader some remarkable evidence on

the working of the human mind.

It only remains to say that the book is throughout well furnished with references, often from the author's previous work, and thus facilitates the prosecution of further studies in this important and fascinating subject. G. D. H.

Ashby. Italy: Folklore.

Some Italian Scenes and Festivals.

By Thomas Ashby. London: 136

Methuen & Co., Ltd. 1929. Pp. xv+179.

Price 6s.

How the adoption of pagan festivals into the Roman Church has proved a source of strength rather than of weakness to the latter is one of the many lessons of this fascinating little book. The Roman Church in Italy has been everywhere faced with local pagan festivals which it must either discountenance and abolish or else modify and adopt as its own. We see here how wisely it has followed the second course and, though strange incongruities arise from this adoption, it is a fact that most of the participants in these rites scarcely notice the incongruities as such, if at all. Just as the ancient temples of Minerva or Hercules have become churches of Sta. Maria della Piliera or of St. Peter, so the festivals, too, are built over and adapted. In many cases, however, enough remains of the old walls and columns to enable us to trace back the history of the building far beyond the date of its christian consecration. Here we have a round two dozen popular Italian Church festivals, most of which, from Dr. Ashby's suggestive description, show clear traces of pre-

christian origin.

The scene of the action often interests him (and us with him) quite as much as the festival itself, and rightly so, since the connection between the place and the ritewhich is performed there is frequently very Thus, the original sanctuary in the grotto above Vallepietra was probably "the shrine of the river deity of the headwaters of the Anio." festivals that take place in pre-eminently agricultural parts of the country are often connected with the weather and coming crops: thus, the successful unveiling of the Madonna at the Sulmona Easter ceremony is a sign of a "bella stagione" (p. 97), and part of the Whitsun festival of Loreto Aprutino gives rise to a forecast of the crops. The classic example of this is the well-known "Scoppio del Carro" on Easter Eve, at Florence, where the smooth flight of the "dove" to the fire-cart from the high altar and back again, with the holy fire, is considered a good omen for the season's raccolta, while, if its flight be irregular or checked altogether, the agricultural outlook is a poor one.

Dr. Ashby takes us for four very pleasant journeys in this book: one to the Alban Hills, one up the Aniene Valley and on into the Abruzzi, another to Viterbo and Lake Bolsena and the last still further afield, to the wild mountains of central

The landscapes and festivals of Viterboand Bolsena, Abruzzi and Sardinia are interestingly described, but Dr. Ashby's beloved Campagna and its neighbourhood form the pièce de résistance of the banquet : 88 pages out of a total of 175.

Who, after reading this book, will not register a vow to see the "Inchinata" at Tivoli and the "festa della Trinità" at Vallepietra as soon as occasion offers?—

I have certainly done so.

There can be but little for a reviewer to criticise in any book of Dr. Ashby's, but one does rather miss a sketch map to illustrate his wanderings and show the situation of the not very well known localities mentioned. I have only found one slip (p. 152): bellows are not used against phylloxera but against the disease of the vines called Oidium tuckeri. The only defence against phylloxera is to root out and destroy the diseased vines and replace them by American vines whose tough roots are proof against the attacks

of the phylloxera insect.

The index at the end of the book is a very welcome aid to reference. The shape and weight of the book are handy, the print is good and the illustrations are excellently reproduced.

Messrs. Methuen & Co. are to be congratulated for publishing it at the very

moderate price of six shillings.

It is to be hoped that Dr. Ashby will soon give us "Some more Italian Scenes" and Festivals." J. A. SPRANGER.

Channel Islands: Archæology. Kendrick.

The Archæology of the Channel 137

Islands. By T. D. Kendrick. In 2 vols. Vol. I. The Bailiwick of Guernsey.

London: Methuen. 1928. Pp. 273,

20 pl. and 131 figs. 25s.

This valuable volume is an inventory with a minimum of comment and a proper meed of appreciation for the work of F. C. Lukis and his sons as well as of the other local archæologists, among whom H. Gosselin, G. E. Lee and T. W. M. de Guérin have rendered special service. Guernsey is rich and was formerly much richer in megaliths, quite a quantity of finds from which have been preserved in the Lukis Museum. Kendrick notes that islands may show precociousness and backwardness, and he obviously thinks that Guernsey shows the latter, i.c., suggests a long persistence of megalithic culture after it had died out in some other places. The antiquities of the Channel Islands resist any attempt to fit them into a continental system of archæological periods. The passage-grave type of monument is dominant and both in type and in contents (e.g., the bell beakers) it is related to the monuments of Brittany and of Le Morbihan rather than Finistère. Kendrick does not argue this as yet, but it seems likely that he will reach a conclusion of this kind.

. He discusses at some length the statuemenhirs, including the best known, La Gran'mère du Chimquière, which he thinks shows the influence of the Mediterranean plastic art of the 6th century B.C. Another statue menhir is thought to be related to the carvings in the cists of Oise and neighbouring departments of France. A remarkable little sculptured stone from Alderney is ascribed to a prehistoric date.

The finds, generally, are related to Breton types, but one more or less Scandinavian

stone axe occurs.

Guernsey is poor in early metal implements but Alderney has yielded a large hoard clearing belonging to the end of the Bronze Age, when such masses of imple-

ments seem to have accumulated in Le Cotentin. The hoard includes barbed spearheads and socketed sickles which are undoubtedly of British origin. Kendrick draws attention to Breton objects also occurring in the hoard and reminds us of the gold torque found at St. Helier, Jersey, and, presumably, indicative of trade with Ireland in the Bronze Age.

Mr. Kendrick deserves the thanks of all students of antiquity and, in this case, gratitude is a lively expectation of his second volume.

H. J. F.

Bibliography.

Work.

A Bibliography of the Negro in Africa and America. By Monroe N. Work. New York: The H. W. Wilson Company. 1929. Pp. xxi+689.

Mr. Work originally intended to deal with the American negro only, who still occupies two-thirds of this volume; with this part the reviewer is not competent to deal. Consequently, what follows must be taken to refer to the African section only. This is divided under such headings as: African discovery and exploration before and after 1800, African civilisation, peoples, laws and customs, religion, etc. This arrangement cannot be called a success-less, perhaps, for its inherent difficulties than for the fact that the author does not seem to have made up his own mind what salient features should guide him in his choice. Thus, he puts Sir Harry Johnston's British Central Africa under Peoples, and the same author's George Grenfell under Laws and Customs. Hollis's works figure only Languages. The various volumes of Van Overbergh's Collection Ethnographique, absolutely uniform in construction, are spread over different sections and some are omitted. Bosman's Guinea appears, quite correctly, as before 1800; a later edition, however, is included in the section after 1800. The date of publication is often taken as criterion and, consequently, the Arab writers, with the exception of Ibn Batuta and Leo Africanus, figure as moderns, recent translations having been used. In the historical part the omissions are very numerous; even Battell, though scarcely to be missed in Hakluyt, is absent. In "Modern Exploration and Discovery," such familiar names as Discovery," Arbousset, Moffat, von Heuglin, Baumann, Pogge, Cameron, von Höhnel, Nachtigal, and Wissmann are lacking; the last-named, however, appears in other sections, while the rest are completely ignored. other authors are remembered for one or two books and not for others: Baker's Ismailia does not figure in any part, while Bentley is mentioned for his dictionary but not for Pioneering; de Calonne Beaufaict for his Azande and Bakango, but not for his Ababua; Bittremieux for one or two books, including the Idioticon, but not for his Bakhimba, and others. The list of dictionaries is very far from complete: thus, there is no record of Morrison's Buluba-Lulua, of Butaye's Kikongo, van der Burght's Kirundi, Lagae and Van den Plas's Zande, and many others. As for periodicals, it would have been better if the author had limited himself to giving their titles (which he does only in a few cases) than to pick out at random a paper here and there and referring to it under the author's name. Avelot is not mentioned; Seligman figures for one paper, so does Stannus.

Attention should be called to some

Attention should be called to some mistakes. The authors of From Benguella to the Territory of the Yacca are Srs. Capello and Ivens, not Sr. Ivens alone. Warega is not spelled Wariga; Francis Fleming does not spell his name with a y

and MacIver uses a capital I.

With all its shortcomings Mr. Work's bibliography is still a very useful book and will be of great help as long as the student realizes its limitations. E. TORDAY.

Assyria: Campbell-Thompson, Excavations. Hutchinson.

A Century of Explorations at Nineveh. By R. Campbell-Thompson and R. W. Hutchinson. London: Luzae & Co. 1929. 8vo. Pp. 146. Maps and illustrations. 7s. 6d.

The authors have declared two objects in writing this little book: the first, to put on brief record the splendid doings of excavators in Assyria, with results so precious for the advancement of human knowledge; the second, to arouse in the English public, by means of this record, a greater interest in the work still going on in the same field. In the first of these they have obtained success; it was fitting that such a record, concise but exact, should be available for the English reader, and it is to be hoped that this age, aroused by the recent brilliant discoveries at Ur and in Egypt, may still feel a little of the thrill roused by Layard nearly ninety years ago when he brought to London the monstrous man-bulls and other such objects that made Ancient Assyria a living reality to a people prepared for it, as they were in those days, by the traditions of Bible history. Then followed the finding of the literature, especially the tablets concerning the Flood and other Bible stories, and Assyria became for a time a place of greatest importance. But those days have passed and interest has waned, yet, as the authors explain, with their quaint reference to Lewis Carroll, there remains an enormous amount of work to do on the same mounds, and none can tell what treasures they still hide, nor what additions to the history of man's development. Therefore, they issue this appeal for help in the continuance of the work, and good students can only wish them a happy success.

G. D. H.

Samoa.

Mead.

Coming of Age in Samoa. By Margaret Mead. London: Jonathan Cape. 1929. Pp. xv + 297. 10s. 6d.

This book ably supplements Professor Malinowski's Sexual Life of Savages, for it is a close and intimate study of the adolescence, neuroses and sexual life of sixty-eight girls in the island of Tau. No male investigator could have done the work so thoroughly, for obvious reasons, and both in method and presentation it is as competent a piece of research as could be required. The background is admirably given, as well as sufficient of the tribal organization and culture to make the particular problem which engaged Miss Mead's attention intelligible. The upshot of an extremely interesting account is that a combination of discipline and responsibility, complete frankness and a homogeneity of culture have produced in Samoan society stable and well-adjusted individuals. In contrast with western civilisation the deviants, of whom only three were found, were girls afflicted with a greater capacity of emotion than their fellows: they had failed to learn the essential lesson of not caring. author reviews the educational problem in the light of her discoveries, and concludes with some valuable appendices which could not conveniently have been included in the text. This is a book which neither anthropologists nor psychologists can afford to J. H. D.

CORRESPONDENCE.

British Guiana: Games. Cruickshank. Negro Games.

To the Editor of Max.

Sir, — Apropos Mr. Herskovits' article on the "national game of Africa" as played by the Bush-Negroes of Dutch Guiana

(Man, 1929, 90), it may be of interest to note that this game, known as wari, is played by native Africans yet alive in British Guiana. The board used has two parallel rows of six holes each, with a hole at each end for the captured men. The men are usually large seeds, such as the "horse-eye," although apparently any seeds, etc., may be used.
"The game's the thing!" One remembers
an old man of the Yagba "nation"—he had three broad "country-marks" slanting down each cheek—who was a great expert; his board was much worn by use. He called it a "sweet game," as the black people generally speak of a "sweet discourse," a "sweet funeral," etc., meaning one wholly gratifying.

Some of the "African Creoles"—i.e., the

descendants at first remove of native Africans also play wari, and some years ago one saw black children in parts of the colony where African traits most strongly persist—e.g., the west bank of the Demerara River—playing tari out in the yard, holes being made in the ground, and little stones, or bits of burnt earth or broken ware, used as men. When the sun moved, the players-and spectators-moved too, and play went on on the shady side of the hut.

It may be explained that the native Africans alluded to are those negroes who, stowed tightly aboard fast-sailing vessels, it was sought to smuggle out of Africa and into Cuba or Brazil after the abolition of the slave trade; who were captured by British cruisers; liberated; and who, with their consent, were brought to British Guiana (as to some of the other British colonies in the West Indies), under a term of indenture, as welcome immigrants, during the fateful years following the abolition of slavery in 1838. They were known as the "Liberated Africans." Many of them were of the Yoruba and related tribes—Abunu, Ijesa, Egba, Ondo (or Doko), Yagba, etc. They are termed locally the Aku, or Oku.

Most of these native Africans are now dead, there being, as the Yoruba say, "no medicine against old age."

Yours faithfully, British Guiana.

J. GRAHAM CRUICKSHANK.

Sociology : Bride Price. Driberg.

To the Editor of Man. 142

SIR,—In Man, 1929, 107, Lord

Raglan* writes: "My impression was that "among these [Nilotic] tribes girls are definitely regarded as a source of wealth." He goes on to say that a girl is accordingly knocked down to the highest bidder in the marriage market, and that this purely commercial transaction is accompanied by every species of sharp practice.

Such a surprising statement demands substantiation, as most modern observers do not share this view of native marriage, and it is not corroborated in the literature dealing with Nilotics. So far different has been my own experience among Nilctics that I know of several instances where a girl's family has preferred a smaller consideration to an un-desirable, though wealthier, suitor. I have only found this commercial attitude towards marriage among the Acholi, and in this case the change in sentiment is due entirely to a breakdown in tribal culture, both through deliberate legislation and through the effects of an undesirable form of contact.

Disputes concerning the amount or nature of the consideration do not necessarily imply that the girl is bartered, and it is worth mentioning that in one tribe at least, the Didinga, such disputes do not occur, as it

would be a heinous breach of good manners to affront a relation-in-law by legal or any other sort of public action.

The very fact that, as your correspondent states, a girl's family is interested in the marriage of her daughter surely indicates that marriage is not a purely commercial trans-action, and points to a deeper significance than marriage is action, and points to a deepaction, and points to admit.
Yours faithfully,
J. H. DRIBERG.

* As previously explained, this letter was inadvertently attributed to another writer.

ANTHROPOLOGICAL NOTE.

A course of public lectures on Early Man and his Culture will be delivered under the direction of the Council of the Royal Anthropological Institute during the coming winter. The lectures will be free and open to members of the public as well as to Fellows of the Institute. They will be delivered at 5.30 p.m. in the Polytechnic Hall, Great Portland Street Extension of the Regent Street Polytechnic, Great Titchfield Street, Oxford Street, W.

The dates and lectures and subjects of

lectures will be as follows:— November 1st, 1929.—Dr. G. Elliot Smith, F.R.S. The Evolution of Man.

November 13th, 1929.—Sir Arthur Keith, F.R.S. Race Building-Past and Present.

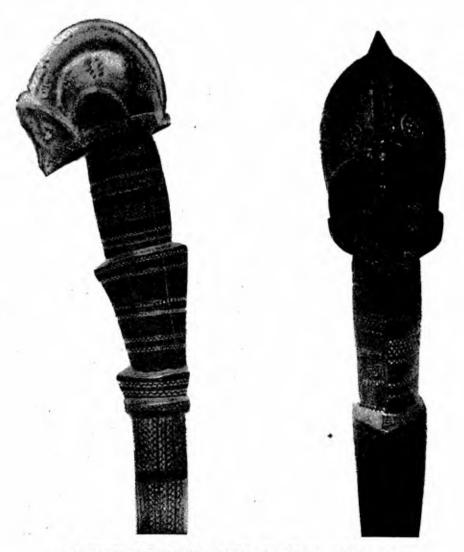
December 11th, 1929.—Professor F. G. Parsons. The Anthropological History of the Modern Englishman.

January 15th, 1930,-Miles C. Burkitt. Most Primitive Art.

February 12th, 1930. H. J. E. Peake. The Beginning of Agriculture.

March 12th, 1930.—Professor J. L. Myres. The Early Use of Metals.





A HUMAN AND LOTUS FORM OF CLUB FROM FIJI.

ORIGINAL ARTICLES.

With Plate L.

Fiji: Technology.

Beasley.

A Human and Lotus Form of Club. By H. G. Beasley, with Pl. L. Fijian art, as we know it to-day, but rarely reproduced either the human or animal forms, and the advent, therefore, of the specimen under review, marks a distinct step in the artistic culture of these people.

These art forms are generally highly conventionalized, and this demonstrates that the culture had existed for a considerable period, for it is obvious that the native mind is, above all, conservative, and such changes as took place must

represent a long period over which the evolution was working itself out.

The human form is hardly ever reproduced in Fiji, and the few examples known occur as oil dishes, and even these are rare, the notable example of a necklet of whales' teeth carved as figures in the von Hugel Collection at Cambridge being an

Among the hundred and one clubs of varying type which are still so numerous, that known as the "lotus" is itself one of the rarest. In the example illustrated here, Plate L, this distinctive type is noticeable below the head; speaking of which, the highly developed crest is noteworthy, as also the ears and occipital ridges. That such represents a highly conventionalized type is obvious, and one conjectures by what obscure path such a remarkable head came to adorn a club. The specimen is of hard red wood, now black with age, and the whole specimen is carved throughout. If the club is inverted it will be noticed that the face becomes much more realistic, and I consider that this is the correct position.

A few other clubs from the same locality are known which reproduce the human face, notably one in the Fuller Collection, another in the Cologne Museum, whilst a third is reproduced in the Edge Partington Album, vol. i, Plate 75. All, however, are much debased, and for the time being that in Plate L represents the most distinctive example that is known to me.

H. G. BEASLEY.

Australia: Bloodgroups.

Woollard and Cleland.

Anthropology and Blood-Grouping, with special reference to the Australian Aborigines. By H. Woollard and J. B. Cleland. The Board of Anthropology, The University, Adelaide.

It is now twenty years since von Dungern and Hirschfeld brought forward convincing proof that group specific substances in the human blood are inherited according to definite Mendelian principles. Though the first expectations that this method would throw a flood of light on the vexed problems of anthropology have not been realised, nevertheless the distribution of these substances is of the greatest interest and importance to the anthropologist.

The literature bearing on the technique and interpretations of blood-grouping occurs for the most part in periodicals dealing more especially with questions of immunology. It might therefore be not inappropriate to reiterate the main facts

that underlie iso-agglutination in human blood.

The term iso-agglutination means the agglutination, i.e., the balling and clumping, of the red corpuscles in a previously smooth and regular emulsion when human red blood corpuscles are mixed with the serum of another human being. The occurrence of this phenomenon has been intensively studied by many investigators and in 1907 it was established by Jansky that there are four kinds or groups of human blood. In the first group the red cells are not agglutinated by any other human serum, while the serum of this group agglutinates the red cells of all groups other

than the first. In the second group the red cells are agglutinated by the serum of the first and third groups, while the serum agglutinates the cells of the third group only. The third is the obverse of the second group. Its red cells are agglutinated by the serum of the first and second groups, while its serum agglutinates the red cells of the second group only. In the fourth group the cells are agglutinated by the serum of the first, second, and third groups, while its serum agglutinates the red cells of no other group. If we represent the clumping factors of the red cells, the agglutinogens, by large A and B, and the factors in the serum, the agglutinins, by alpha (a) and beta (β) , then we can conveniently resume the above facts in the following table:—

		RED BLOOD CORPUSCLES.			
	Group.	I. 0	II. A	III. B	IV. AB
	αβ	0	+	+	+
Serum	β	0	0.	+	+
	а	0	+	0	+
	0	0	0	0	0

+ = Agglutinin.

O = No agglutination.

O, A, B, AB = the agglutinogens of red blood cells.

 $\alpha\beta$, β , α , 0 = the agglutinins of the serum.

Abundant evidence has been brought forward that these group factors remain constant throughout life. Moreover, it has been shown that in embryological development the specific agglutinability of the red cells, i.e., the agglutinogen, appears first and is usually present at birth. The agglutinating power of the serum, i.e., the agglutinin, appears later, usually about the second year of life. The agglutinin is regarded as something less rigid and more contingent than the agglutinogen.

The existence of these agglutinogens and agglutinins, their specific relationship, and their complete removal by each other have been established by many experiments. Investigation has further established that A and B never occur in the child unless present in one of the parents; that, if one of these substances is present in both parents, then it is present in most of the children; or if one of them only is present in only one of the parents, then only some of the children possess it; if neither of them is present in either parent then the children do not possess them. In short, they behave as Mendelian dominants. Factor A is an inherited character and is dominant over not—A, while B is dominant over not—B. A and not—A, B and not—B, are inherited independently of each other. Ottenberg has graphically shown the results that ensue in the offspring from the distribution of A and not—A, B and not—B in the parents. The most important conclusions are:

(1) Unions of groups I and I, give only I;

All unions containing a group IV, and all unions containing groups II and III, may give rise to any of the four groups. A group I may come from any combination in the parents. While the rough distributions of the four groups have been much the same in the hands of all workers, the actual percentages show considerable variations in different places.

It was the war that gave to the Hirschfelds the opportunity of making many thousands of investigations on men of many different races in Serbia. They expressed their results as the ratio of the distribution of the A factor to the B factor, and this they called by the somewhat large title of biochemical index. In general, A was the more frequent in the inhabitants of north-western Europe and decreased as one travelled towards the south-east. The B factor was more frequent in Asia, especially India, and gradually decreased towards Europe. The inhabitants between these two areas presented an intermediate type. They suggested that A arose in Europe and B in India, and the present distribution was the result of migration and intermixture. In general, it was suggested that the original human race was homogeneous, i.e., showed neither A or B; that in prehistoric times, probably about the central plateau of India, there arose a sport or mutation, B, in the biochemical structure of the red cells, while somewhere toward western Europe there arose another mutation, A.

The present geographical distribution of A and B is, then, accounted for by their mode of inheritance and the wandering and intermingling of races.

It was soon felt that the index proposed by the Hirschfelds was inadequate, as it ignored the first, or O group, and when races were discovered with a great frequency of this group there was no way of fitting them by the A/B ratio. Ottenberg proposed in place of the A/B ratio a kind of histogram in which the height of the columns presented the respective percentages of the three groups O, A, and B. On the figures available he proposed six great groups of mankind. The sixth group of this classification was later divided in order to separate the Australian aborigines. Other indices have been proposed and other classifications have been suggested from time to time.

The Grouping of the Australian Aboriginal.

Investigations have now been carried out in various parts of Australia, and the results obtained may be put together as follows:

		Number	The second second second				
Author.		Examd.	Place.	0.	A.	B.	AB.
Tebbut	and	192	Southern Queensland .	56.2	38.5	4.1	1.0
McCon	nell.						
Lee		377	North Queensland .	63.3	31.7	6.4	1.6
Cleland	158	Central Australia and South Australia.	48%	52%	0	0	
		68*	Ditto	. 34%	66%	0	0
			* Not previously repo	orted.			

It will be observed that the A group is the most frequent in those aborigines who belong to central and south Australia. This means that when the results are those of natives whose purity is above suspicion it is found that the Australian aboriginal contains no B factor.

In this work on the natives of southern Australia cross-tests to the number of 500 were carried out in order to exclude the presence of factors in aboriginal blood that might not be present in white blood. The suggestion has been put forward that using the sera of known white bloods would not disclose the presence of such. As a matter of fact, no evidence of peculiar iso-agglutination was obtained by cross-tests. Moreover, when the serum of these natives was tested against the red cells of whites of known groups, it was found that it contained the agglutinin beta (β) , as it should

if its biochemical composition was in accordance with the results obtained on all other human bloods.

When a review of the results of previous investigations on different races is attempted, it is at once apparent that blood-grouping fails to provide an infallible test of race. The frequency of the A group in the Australian has suggested that the Australian aboriginal has nordic affinities, and some writers have solemnly recorded lists of characters in which he resembles the nordic. Many investigators have found the widest discrepancies in the group percentages of obviously closely related peoples. This is true of the Ainu, for instance. Obviously, the percentage grouping is only one racial character, and no more suffices to distinguish a race than any other single character that might be chosen.

Anthropologists might, therefore, be tempted to ignore blood-grouping as a weapon of service to them, and already there are murmurings against it. We think



Map of Australia.—It will be noticed that the B factor is present in the coastal part of Queensland, but decreases in frequency as one proceeds south. In central and southern Australia A only is present.

this would be a mistake. No doubt the rosy hopes it encouraged in the first instance are not going to be fulfilled. Nevertheless, the ease with which it yields measurable results, the precision of its applications, the definite inheritance of the factors concerned, furnish it with advantages that no other anthropological method possesses.

It has been implicit, and usually explicit, in the generalisations about race made by those who have studied the group percentages, that the first humans were homogeneous and contained neither the A nor the B factor. But there is now evidence which throws grave doubt on this assumption. During 1925, Landsteiner reported an investigation of these group factors in a large series of animals. It is apparent from his work that these serological substances have a widespread distribution in the animal kingdom. By special methods he was able to show that they were similar to but not identical with those found in human blood. To this generalisation, however, there was a very important exception—namely, the anthropoid apes. The iso-agglutinins which occur in them are identical with those found in man. Of course,

it has not been possible to study many examples of the anthropoids, but sufficient has been done to establish the presence of these substances and their distribution. In the gibbon, for instance, only the A factor is present; in the chimpanzee, of which eight examples have been tested (Landsteiner 5 and Hirschfeld 3), the A factor has been discovered but not B; in the orang both A and B have been found; unfortunately, no examples of the gorilla have yet been submitted to examination.

Herein lies a further answer to the now almost rhetorical question: How close is man to the chimpanzee-gorilla stock? Obviously very much closer than most of us care to admit. We would infer from these facts about the distribution of the factors in the anthropoids that man got them owing to his descent from an ancestor common to him and the anthropoids, that he probably started with all four groups, and that in his differentiation the percentages altered and in some cases whole groups dropped out. These facts concerning the distribution of the group factors in the anthropoids have led some anthropologists to open again the question of the polyphyletic origin of man. It is sufficient, however, if we assume the possibility of all four groups being present in ancestral man because of his affinities with the anthropoid stock.

Blood-grouping being only a single anthropological character and therefore in classification not necessarily having any more weight than any other charactersuch as hair or pigmentation, for instance—has necessarily failed to revolutionize anthropology. Nevertheless, certain facts do stand out. In groups like the inhabitants of Europe the fluctuations of the group percentages do corroborate what is already conceded by everybody, that the inhabitants of Europe are thoroughly mixed. The broad distribution of A and B do suggest what nobody denies, that the ebb and flow of people has been from East to West, and West to East. When the analysis is pushed further great disappointment arises. The percentages fluctuate considerably in groups living in close propinquity and outwardly indistinguishable. For example, Grove, who investigated various Eastern races, found that groups of Ainus differing from one another in no other anthropological feature, were characterised by great differences in the percentages of their blood groups. Indeed, Ainus and Koreans showed similar blood groups, though very different in every other way. Also there was considerable likeness between Ainus and Malays in their biochemical index-a conclusion at variance with all other anthropological data of these people.

Another surprising feature is brought out by the investigation of the American Indians and by the present investigation of the Australian aborigines. When every precaution is taken to exclude persons of mixed origin it is difficult to escape the conclusion that the pure-blooded members of these two races represent varieties of man characterised by possessing blood which contains the group specific substances of one group only. The American Indian belongs entirely to the group O, i.e. group I, possessing neither the A nor the B factor, while the Australian belongs to the second group having the A factor only.

It is to be noted that in the serum of both these races the agglutinins are present in the serum and so distributed that they conform to the distribution of these substances in races which have all four groups. In the American Indian, although neither the A nor the B agglutinogen is present, nevertheless the alpha and the beta agglutinin are present in the serum. Similarly, in the Australian, although he possesses only the A factor, nevertheless the beta agglutinin is present in his serum. If the ancestral man was homogeneous, it is difficult to see why the serological substances need have this distribution in races, where one or both agglutinogen factors are absent. It becomes explicable on the supposition that these races are derived from ancestors who possessed all four groups.

All these facts regarding the distribution of the iso-agglutinogens of human blood incline us to invert the almost universal way of looking at blood-grouping at this moment. Instead of this single anthropological character being expected clearly to stamp each variety of man, the problem is rather to explain how the existing varieties of man obtained their present percentages and, indeed, how it is possible for a human type to escape the inheritance of all four groups and come to possess one only. Thus, because the rather pathetic sub-man of Australia has a high frequency of the A factor, we need not suppose that it implies a close affinity with the nordic superman who also possesses a high frequency of A. It has now become clear that it is possible for two races to mix and alter their percentage blood-grouping without changing any other anthropological feature, or, on the contrary, change their physical character and retain the original percentage.

Let us suppose that the ancestral human family contained all four groups for the reasons given, viz., the distribution of these substances in the anthropoids and the presence of the agglutinins in the serum in their proper array even when the A or the B factor, or both, are absent. A pure A group with a percentage of not-A could arise from parents each with the genetic constitution of (A not-B, not-A not-B). This would give, theoretically, a percentage of 25 per cent. not-A. In the last of the series studied by us the actual percentage so far revealed of not-A is 34 per cent. Having regard to the actual number examined the probable error must be in the region of 4 per cent. We may well suppose that the actual results are practically in alignment with the expected distribution. Thus, it seems an inevitable conclusion that the ancestors of the Australian aboriginal started with this genetic constitution of blood-grouping. In order that this might be preserved and the type be restricted to a single group, it is necessary to suppose the ancestors must have been extremely few, for every addition to the original pair producing this type must have increased enormously the prospect of more than one group appearing in the descendants. The restriction of a race to a single group tells us nothing of the time when such a fortuitous inheritance could have happened, and it tells us nothing of the relative antiquity of races in which such a reduction occurred. It does, however, force the assumption that the start of such a race must have been from a few individuals who possessed the necessary genetic constitution. Such an assumption might be borne out by, and in turn tested by, the legendary accounts such a people might give of their origin. It is generally stated that the aborigines do not possess any such legendary lore. It is a task beyond our knowledge to examine critically the value of this suggestion either in the case of the Australian aboriginal or the American Indian.

The coming together of ancestral individuals of the genetic constitution we have suggested may have been entirely fortuitous. But there is the possibility of other factors. The rate of man's increase has been amazingly slow. Knibbs has calculated that if man started from a single pair one million years ago, then the rate of increase has only been 0.00207 per cent. per annum, which is incredibly low. The mortality, of course, has not been entirely at random. Natural selection has always been at work. And it is possible the natural process may have been more highly selective in the case of certain blood groups.

Much investigation has been devoted to determining the correlation, if any, between physical and physiological characters on the one hand, and blood-grouping on the other. Many highly suggestive results have been adumbrated. Malaria is said to decrease with group I and increase with the presence of group II. Infectious disease and cancer have also been studied in the same way. Obviously, a selective mortality in childhood would have a great effect on the blood group-distribution. Bodily constitution has been studied in relation to the distribution

of the group. The hypersthenic type is said to have a more frequent association with group II. However, no such investigations have yet been very conclusive, and in the present state of knowledge nothing definite can be said about such correlation. Nevertheless, it offers an attractive field for further study.

The maintenance of such a characteristic blood-grouping as that which occurs in the two races mentioned must need a complete isolation maintained from the time of immigration until the period when the particular grouping was discovered. This suggestion is, of course, not improbable, for there is every reason to suppose that it must have happened in both the cases under discussion. Moreover, we get evidence from other sources that the Australian aboriginal represents a wonderfully homogeneous type. Morant, working in the Eugenics Laboratory at University College, London, has arrived at this conclusion from a biometrical study of the physical data of the cranium of the aboriginal, and affirms his homogeneity except in the case of the aboriginal inhabitants of the northern part of Australia, the region where, from geographical circumstances, some intermixture is likely to occur. This is also the region in which the natives show some slight departure from the pure A group Our own investigations have disclosed the presence of the B group in persons who were known to be of impure blood.

When we find a considerable fluctuation in the group percentages of races who, so far as all other methods of examination go, are homogeneous, it suggests again the need of special investigation to determine the reason for this. We have already spoken of intermixture and differential mortality. Further, it occurs to us that selective mating may be a factor worthy of investigation. Can such customs as endogamic and exogamic marriage play a part here? This may be mere speculation but it does seem to us that a knowledge of the percentage blood-grouping of a people may confirm certain inductions of the cultural anthropologist and, at the same time, fluctuations within a group may suggest the need, and even the kind of investigation it may be desirable to carry further.

Thus, we suggest the value of blood-grouping lies not in the first anthropological notions concerning it, viz., that it would almost automatically by itself mint out the races of man. Rather we believe that its service lies in its numerical value and its simple but definite hereditary nature, thus testing the validity of some anthropological hypotheses and suggesting other explanations and enquiries.

SUMMARY.

- (1) Evidence has been brought forward to show that the pure-blooded aboriginal of Australia conforms to that blood-grouping in which only the A iso-agglutinogen is present.
- (2) The reciprocal relations between anthropology and blood-grouping have been briefly discussed. H. WOOLLARD. J. B. CLELAND.

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Ireland: Archæology.

Gógan.

A Composite Tool from a co. Down Sandhill Site. By L. S. Gógan. 146
The object illustrated (Fig. 1) was excavated from a "black layer" 146
(inhabited horizon) in the sandhills at Dundrum, Newcastle, co. Down, Ireland, during the present season, by Rev. L. M. Hewson, Rector of

Carbury, co. Kildare, a well-known Irish investigator and collector, with whose kind permission it is here published.

The point at which it was found now stands out as an island, cut off by the sea and wind-driven sand from the main bank. This "island," of a few yards diameter, proved rich in artefacts of various kinds, including three pottery types (one a lamp), which I hesitate to date at the moment but which are hardly contemporaneous with our object;* the arrow head (Fig. 2) found in the black layer of the main bank may furnish a better key to its true chrono-cultural horizon.



Fra. 2 (actual)

The object in question is a compound tool formed from an L-shaped flake of flint struck directly from a core, some of the incrustation still remaining on the side. Every available edge, as also every available point except one, and



a—side view. b—interior (front). c—back d—base. Fig. 1 (half).

this latter probably broken off by accident, has been adapted for use. The apex of the long side is a burin or ripping-tool; below, at either side, are two hollowchipped edges (scrapers?) worked from the back and front surfaces respectively; then follow two pointed members, and two hollow-scraper adaptations ending in points, one of which, as already stated, is broken off. The base is adapted as a borer, with chipped hollowed outlying edges.

In spite of its complexity a certain symmetry in treatment is observable. No similar object from the Irish flint regions is

known to me. The drawings are by Miss E. Barnes.

L. S. GÓGAN.

* The difficulties of sandhill associations are well known. See: Fox, Cyril, "A Settlement of the Early Iron Age." Archeologia Cambrensis, lxxxii, pp. 55-58.

† Smith, Reginald A., "Flint Arrow-heads in Britain." Archeologia, vol. 76 (1926-27), cf. fig. 17.

Africa, Central: Technology.

Young.

A Note on Iron Objects of Unknown Origin from Northern Nyasaland. By the Rev. T. Cullen Young.

At some point between 150 and 200 years ago a small group of men entered the territory which is now Northern Nyasaland. They came from the East, crossing Lake Nyasa, and to this day they bear the name of "waMlowoka," meaning "the people of him who crossed over." Tradition has it that they made the crossing of Nyasa, "pa kapondo," the nearest translation of which is probably, "on a plank." Whatever name their leader bore at that time has been entirely forgotten and the name Mlowoka, i.e., "He who crossed over," is the only one by which he is known today.

At the largest estimate, the small group did not contain more than ten men; that is to say, ten principals. No mention, of course, is made of women or followers,

though, since they "came with much goods of cloth and beads," some considerable caravan may have accompanied them. The point at which they crossed the lake is known, as is also the general line of their subsequent They came "without war" and, by introducing the local family-groups to the value of ivory and the skins of the lion and the leopard, gradually came to exert an influence and acquire a prestige which resulted in a dynasty of "Chikuramayembes," the ninth direct descendant being recognised by Government today.

The object of this note, however, is not the history of this interesting invasion of a primitive African area by the first ripple from an outside world of trade and individualism. A reconstruction of the history of the area has been attempted in my "Notes on the Speech and

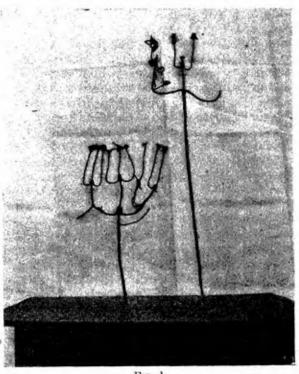


Fig. 1.

History of the Tumbuka-Henga Peoples," published locally in 1923. But it is necessary to try, before it becomes too late, to discover the original home of that small group. By a fortunate chance I possess one possible clue to a line of investigation which, by the assistance of others who may read this, may bring some result. That clue is represented by the photograph here reproduced (Fig. 1).

Tradition has it that Mlowoka and his party "came as Arabs"; which is to say that, not being genuine Arabs, they had an Arab appearance from their methods of dress and trading purpose. There is not the slightest record of Islamic customs; no Book, no prayers, no circumcision. But from the grave of Mlowoka have come two things :-

(a) fragments of Chinese crockery,

(b) the shorter of the two iron "implements" here reproduced (Fig. 1).

These were removed from his grave, at or near the surface, by the present Chikuramayembe, accompanied by Capt. W. H. Dye, late R.A.M.C., and now M.O. under the Tanganvika Mandate Government, by whom they were handed to me.

The fragment of crockery has been identified as Chinese of the 16th or 17th century, and there is no difficulty in attributing it to the Bazar at Zanzibar or Kilwa, but the iron "trident" is quite another matter. The second, and longer, of these was brought to me by the present-day representative of one of the original "Mlowoka" families when he knew that I was engaged upon the history of his country. Later, I got a third (broken) example of the same type, which is not here reproduced.

The length of the longer specimen is just under four feet.

The known points are: (a) That the "tridents" were associated with kingship. (b) That they bear no relation whatever to any existing or remembered form of ironwork indigenous to the area. (c) That they create as much surprise when exhibited to the people today as they do to the European. (d) That the only known ironwork bearing any resemblance at all to these is reported from the Gulf of Guinea. For this fact I am indebted to Mr. Joyce at the British Museum, who now has the smaller "trident" in his possession. (e) That an intelligent Yao of about forty years of age, on being shown the taller of the two in my house, said that his old mother had once told him that their ancient chiefs had always in their possession an "iron thing of branches ending in arrow-tips, which was never seen by common people but went where the chief went, concealed securely in a mat."

One or two indications suggest that although Mlowoka certainly came across Nyasa from the East in (as I read it) a plank-built dhow, and carrying, presumably, Zanzibar goods, yet his real home may have to be looked for in the West. One day, for example, I overheard a very old man who was mumbling about the old days, mention a hill, "Nkarang'aza," which is in all probability a reference to what today we know as Garanganze; and there are one or two other indications within

the language itself.

I venture, therefore, to reproduce this photograph in the hope that evidence may be discoverable elsewhere of similar design, and possibly similar attribution,

which will throw light upon our local problem.

The area involved is that left blank by Mr. Schapera in his article in Man for May upon Bantu Distribution, viz., the area lying between the awaNkonde at the north end of Nyasa and the Nyanja-speaking peoples of its south-west and southern shores. The awaNkonde, as a matter of fact, seem to have been later arrivals than Mlowoka and took over the area which they now occupy after an arrangement of boundaries (accompanied by the sacrifice of a man and an ox) with Mlowoka or his immediate successor. Previous to that date, which is probably within the closing decade of the 18th century, the land from the present Tanganyika-Nyasaland border in $9\frac{1}{2}$ S. lat. to the River Dwangwa in $12\frac{1}{2}$ S. lat., had, to some extent at least, been brought within the authority of Mlowoka and his "trident."

T. CULLEN YOUNG.

Sociology. Evans-Pritchard.

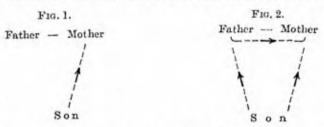
The Study of Kinship in Primitive Societies. By E. E. Evans-

Now that ethnological investigations are being made by field-workers in many parts of the world, it may be useful to suggest new view-points from which they can make their observations. There is one aspect of kinship which appears to have largely escaped the notice of ethnologists, but the importance of which is so considerable that attention may well be directed to it. We know that a man's patterns of behaviour towards his kin are built up in the family organisation into which he

is born and in which he grows up. The importance of this "initial situation" of kinship has lately been especially emphasized by Malinowski, who, in this respect, like many other ethnologists, has been richly rewarded by contact with the work of psycho-analytical writers. It is not necessary to discuss here this approach to the method of studying kinship, since there are several readily accessible books in which the genesis of kinship within the family has received special attention. (1) I wish to show in this note in what respect the potentialities of this approach have not been fully realised even by those who have most insisted on its use.

Through the sentiments which a child builds up around those who associate most intimately with it—its mother, father, brothers and sisters in the ordinary patrilocal family—it acquires a large number of attitudes towards the extra-family world, e.g., towards authority, towards the opposite sex, and so on. Many of these attitudes are towards persons, especially towards relatives, and we know that the patterns of behaviour which a man observes towards his kin are due in the first place to an extension of his intra-family sentiments to include these people. Owing to the deep attachment of a child to its parents it takes over their dispositions towards its relatives. It imitates its parents and looks at its relatives through their eyes.(2) These dispositions become observable to it both as socially prescribed behaviour-patterns and also as the real feelings of its parents towards these people, and such feelings are often revealed in the confidence of home life as something very different from the attitude which is expected in public.

The reader must supply his own examples of this process from the areas which he knows best. The point which I am trying to bring out will be seen more clearly if he commences to study the interaction of behaviour-patterns within the restricted family group of father, mother and small children. My own observations amongst the Azande of the Nile-Uelle Divide, a patrilocal people whose modes of descent, inheritance and succession are patrilineal, show that it is difficult to understand the authoritative and estranged attitude of a boy towards his mother unless we realize that the exclusive attachment to his mother in infancy undergoes a very profound change through daily contact with his father. The child observes the behaviour of his father towards his mother and largely takes it over as a model for his own attitude towards her. The behaviour of a Zande towards his wife is often different in a large polygynous family to his behaviour in a small monogamous one, and one may observe a corresponding difference in the child's regard for his mother. Therefore to grasp the full meaning of the son-mother relationship we have to take into account not only the whole complex of mutual obligations and privileges, standardized modes of behaviour, biological and legal affinities and terms of nomenclature composing this relationship, but we have equally to study those which compose the husband-wife and father-son relationships. In other words, when we are studying the behaviour-pattern of a son to his mother in any society, we should not content ourselves with following the line Son-Mother, as in Fig. 1 of the diagram below, but we should follow also the lines Son-Father and Father-Mother as in Fig. 2.



This may seem a very obvious point to make, (3) but it is a commonplace which has been neglected even by those who have done most to direct our study of

primitive kinship. Thus Malinowski, in attempting to account for the affectionate response of a father to his babe in a society ignorant of physiological paternity, puts its down simply to an innate emotional attitude of the male buttressed by certain social rules. He does not discuss at all the possibility of the child entering into the well-developed sentiment of the man towards its mother, and producing the typical emotional reaction which we should expect according to Shand's theory of the sentiments.(4) Let us take the sister's son-mother's brother relationship as another example and see how it has fared in theoretical treatment. The peculiar custom which enables a boy to "steal" the goods of his mother's brother in various societies in Africa and Polynesia has been given a pseudo-historical explanation by Sidney Hartland, Junod, and other writers. According to them this custom is evidence of a change from matrilineal to patrilineal descent.(5) The errors of such explanations, and the injuries which they do to anthropological research have been lucidly exposed in late years by several writers, and no arguments need be added to their criticism.(6) Malinowski has made a very full theoretical analysis of the attitude of sister's son to mother's brother in a Melanesian society with patrilocal residence and matrilineal descent and inheritance. He observes that the young man has a repressed hatred for his mother's brother, and accounts for this by showing how the mother's brother enters into his sister's family life in the essential role of authority. becoming in consequence the ogre of the "matrilineal complex." (7) Now, whilst Malinowski tells us that the attitude of sister (the boy's mother) to brother (the boy's mother's brother) is very respectful and subservient, he tells us nothing of the attitude of a man (the boy's father) towards his brother-in-law (the boy's maternal uncle). But if one may guess from the accounts of Trobriand life published by this acute observer one would say that the attitude of the father towards the mother's brother must be one of the most dramatic and deep seated reactions of Trobriand social life, and would at least partly account for some of the more lurid features of the Œdipus complex in this society. There is much in Malinowski's account which leads one to think that deep and strong jealousy must exist between the two men, and if this is so it must inevitably colour the attitude of the boy towards his mother's brother. Consequently we doubt whether Malinowski's view that the typical complex or sentiment towards the mother's brother in the Trobriands has its origin without and not within the family circle is a correct interpretation. We suggest instead that the sentiment is formed within the family circle and intensified by later and outside contact.

Radeliffe-Brown has also given some attention to the sister's son-mother's brother relationship in the paper referred to overleaf. In this paper he shows how social life within the restricted family,(8) produces a special pattern of behaviour between a son and his mother. This pattern, characterised by the freedom and absence of fear with which a child treats its mother, is extended to the mother's brothers and sisters, and through them to the ancestral spirits of the maternal clan. Now natives certainly do extend behaviour-patterns in this way, with modifications due to person, age, sex, special upbringing and so on. The main criticism of Radcliffe-Brown's treatment of the problem lies in the fact that he dissociates the sentiments of the child towards father and mother, whereas they interact and colour each other. We should think of them as intersecting circles of sentiment. If we apply the argument of this paper to the case in point we see that the writers quoted above have examined the attitude of sister's son towards the mother's brother without taking into consideration all the relevant factors which are to be found in the full context of native life. The main relevant factor which they have neglected is the influence of the father in the formation of the sentiment towards the mother's brother. I hope to develop my own view of this relationship at some length when I write my account of kinship amongst the Azande, but briefly it runs as follows:

The human family is essentially a twofold organization, i.e., it is based on the relationship of man and wife, and this duality is to be seen also in the groups which are extensions of the family. Since marriage and the family have this dual nature, and since the two parents exercise the main formative influence over the character of their child in early life (at any rate in the patrilocal family), it seems probable that the child will have an ambivalent attitude towards any person about whom its parents have very different and pronounced feelings. Now, in most savage societies, the wife's brother is the pivotal relative in the institutions of marriage and the family. and the attitudes of husband and wife are more pronounced towards him than towards other members of their kin and are more pronouncedly different. We may therefore be prepared to find some evidence of this clash of sentiment of the parents in the attitude of the child towards his mother's brother. Such evidence may appear in the form of strong repressed dislike of the mother's brother, such as Malinowski has unearthed in Melanesia, where it receives particular emphasis from the special institutions, modes of residence, inheritance, descent, etc., which exist in this locality. On the other hand, in tribes such as the Bathonga or the Azande, where similar institutions act far more decisively and wholeheartedly in favour of the father's line. and where consequently the friction is less severe, we find evidence for an ambivalent attitude towards the mother's brother in various forms of ritual, one of which forms is "ritual stealing."

I cannot in so short a note develop or document my point of view any further, but I feel that the approach from this standpoint should be able to throw light on many kinship usages which have hitherto been imperfectly understood. It can be used to explain the attitudes of a man towards many more relatives than those mentioned in this note. For example, Mrs. Hoernlé suggests that the attitude of a man towards his father's sister amongst the Hottentots can only be fully understood when we have examined the attitude of a man towards his sister, (9) i.e., of the boy's father towards his father's sister. It may also help us to understand other kinship usages. For instance, I think that it is quite possible that the terms of address used between brother and sister are sometimes taken over from those used by the parents in addressing their children. (10)

I could multiply examples of this kind, but the reader can easily do so for himself. Finally, I may add that it is especially important that observations of the kind suggested in this note should be made for different types of family organization, especially those in which the father is not a permanent resident member of the household, but simply visits his wife from time to time. It is only by such comparative observations that we can really hope to solve the problems of kinship.

E. E. EVANS-PRITCHARD.

REFERENCES.

(¹) See, for instance, Malinowski: Sex and Repression in Savage Society, 1927; The Sexual Life of Savages, 1929; and other writings. Radeliffe-Brown: "The Mother's Brother in South Africa," South African Journal of Science, 1925. Ernest Jones: Psycho-Analysis, 3rd ed., 1923. Flügel: The Psycho-Analytic Study of the Family, and psycho-analytical literature generally. See also Mrs. Seligman's paper on "Incest and Descent," in J.R.A.I. 1929.

(2) There can be no doubt that attitudes of this kind are not fixed and permanent but undergo considerable modification in later life, since they vary with change of age, interests and social status. To take a very obvious example, the attitude of the child towards its father and mother is not the same as that of the grown man. Or again, the attitude of a key towards his mother's brother in a society with matrilineal descent intensifies as their contact becomes less agreeable.

(3) It is a point which is realized by every mother in every European household. She, at least, knows very well that her children will model their attitude towards her upon the behaviour of their father. This is probably true mutatis mutandis of every society.

(4) Sex and Repression in Savage Society, chap. V. Shund: The Foundations of Character, 1st ed., 1917. (5) Sidney Hartland: Primitive Society, 1921. Juned: The Life of a South African Tribe, 2nd ed., 1927.

(5) See especially three papers by Radcliffe-Brown: "The Mother's Brother in South Africa," vide supra, and "The Method of Ethnology," South African Journal of Science, 1923; and Man, 1929, 35.

(*) I must refer the reader to Malinowski's book, Sex and Repression in Savage Society, for the full meaning which he attaches to this expression and to other terms taken from psychoanalytical literature.

(*) He is specially referring to the Bathonga nation, who have patrilocal residence and patrilineal modes of descent, inheritance and succession.

(*) A. W. Hoeruló: "The Social Organization of the Nama Hottentots of South-West Africa," Amer. Anthrop., vol. 27 (1925), p. 22. I am indebted to Dr. I. Schapera for this reference. He was also kind enough to discuss this paper with me.

(10) Amongst the Azande, parents address children of both sexes by the term wili. A brother addresses his sister by the term dewili and a sister addresses her brother by the term kawili.

Africa: Ethnology.

Cline.

An Antique Pipe-bowl from the Siwa Oasis Depression. By Walter Cline. Peabody Museum, Cambridge, Mass., U.S.A.

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On the last evening of my last visit to Siwa Oasis, in the Libyan Desert Captain G. M. Hillier showed me a small clay pipe-bowl (Fig 1) which had been sold to him by a Siwan. The Siwan claimed to have found it on the borders of the





FIG. 1.—AN ANTIQUE PIPE-BOWL FROM THE SIWA GASIS DEPRESSION. SIDE AND BOTTOM VIEWS.

Oasis, near the ancient tombs, and regarded it as a common type of "antika." Captain Hillier has often seen such pipe-bowls used by the local Bedawin, who say that they never make them themselves, but find them in the Siwa depression. When we questioned two Siwans who happened to be with us, they independently gave us the same account of these pipe-bowls; recognizing the clay as similar to a Siwan variety, but admitting that the workmanship far excelled that of any modern Siwan potter.

The paste is an even dark brown, very hard and smooth. The bowl and adjacent clay portion of the stem are about $1\frac{1}{2}$ inches in length. The bowl is $\frac{3}{4}$ inch high; flat at the bottom of the interior; and decorated on the sides and bottom of the exterior with heavy vertical corrugations, and in the centre of the outside bottom, to which these corrugations lead, by a little rosette, reminiscent of the rosette stamped on modern Moroccan leather and Tripoli silverware. A swelling about $\frac{1}{3}$ inch broad surrounds the stem at $\frac{3}{4}$ inch from the bowl; its summit and borders decorated with bands of

geometric ornament, as shown in the figure. These designs may have been stamped rather than incised.

Anyone who can identify this type of pipe-bowl would greatly oblige me by writing.

WALTER CLINE.

Obituary.

Burkitt.

Professor Louis Capitan. By Miles C. Burkitt, M.A.

In Dr. Capitan, prehistory has lost one of "the Old Guard." Since Emile Cartailhac died one has thought of Capitan as the doyen of the subject. Of great energy as well as charm, he continued, in spite of advancing years, to keep

abreast of the times in prehistory, and most of the younger men were proud to count him as a friend. Not only did Dr. Capitan collect an almost unique series of the relics of ancient man, but the list of his publications on prehistoric matters-even since 1910-is formidable. It is true that he often worked in collaboration-as, for example, in the case of the various publications on the painted caves in the late Prince of Monaco's series-but, none the less, the work he produced was very extensive and extremely important. Dr. Capitan was not merely a collector and writer, he was also a teacher, and as professor of the School of Anthropology in Paris he had a number of students of early man continually passing through his hands. During the war he made full use of his medical knowledge and worked devotedly in a hospital with hardly any intermission. Indeed, it was then he contracted an obscure disease from which he never really recovered. Yet at the various sessions of the Congresses of the International Institute of Anthropology in Liège, Prague and Amsterdam, he was full of energy and keenness. He often occupied the chair and contributed to the discussions. The short, bent figure with the long face and kindly smile will not be easily forgotten. It is sad to see the pioneers, who have helped to make the subject, leave the stage; but Dr. Capitan will take his place with Piette and Cartailhac among the distinguished prehistorians of the latter part of the last century and the early years of our present era. M. C. BURKITT.

REVIEWS.

Spain: Archæology. Breuil, Burkitt.

Rock Paintings of Southern Andalusia. A description of a Neolithic and Copper Age Art Group. By Abbé Henri Breuil and M. C. Burkitt, with the collaboration of Sir Montagu Pollock, Bart. Clarendon Press, Oxford, 1928. Royal 4to. pp. xi+88. 10 plates, 54 figs., 7 maps.

This sumptuous volume, whose only fault it may be said at once is the lack of an index, is a monument to the skill and industry of the authors, and more especially the Abbé Breuil, who is responsible for most of the field-work, and for the descriptive letterpress.

Although the largest cave in the series (Las Figuras) is barely 10½ feet by 7, and 6 feet high, the walls contain some 500 figures, painted in eight different tints on the rough surface, faded, and barely visible in the dim light. These have been drawn out in extenso, and reproduced in a coloured plate. The colour age-sequence has been worked out from superposition, and in Las Figuras the details are described in sections according to colour. The colours in the other caves are also generally mentioned.

Sir Montagu Pollock, in his translation, has been able to adopt a fluent and easy style, which is eminently readable. His elaboration of Obermaier's evolutionary series of stylised human figures and his English nomenclature for the types, are a valuable contribution.

Save for a few relics of the "Old Masters," and some figures of animals and birds of a later age, the reader expectant of asthetic enjoyment from this work will be disappointed. But not the archæologist. Here he has for the first time in their proper setting the mysterious signs and stylised figures with which the authors and Dr. Obermaier had already familiarised us. True, the general impression received is that the figures and designs have been drawn and scattered at random over the surface, yet such explanations as M. Breuil of his wide experience is able to offer are always arresting, convincing the curious student, who has material in plenty here for furious thinking, that there is much more in it than meets the eye.

Mr. Burkitt's particular contribution, in addition to the excellent photographs of views, is the Introduction and General Conclusions.

The latter are all too brief. He only whets our appetites with his details in discussing the raison d'être of the paintings, which seems to be magico"religious" in the more inaccessible caves, and protective in some which seem to have served as dwellings. So also regarding the age of the art and the provenance of the artists. We have contemporaneous pictures of men apparently armed with stone club-axes and with copper axes, while the pottery discovered, and drawings strongly resembling megalithic tomb designs

and the well-known schist idols, all point

to the Neolithic-Copper Age.*

But the significance of the painted Azilian pebbles, which are widely accepted as representing some of the final evolutionary stages of stylised human figures, is not sufficiently considered. Can it be that at Mas d'Azil there was a Mesolithic survival right into the period of this (Group III) Cave Art? Again, there is the interesting question of the cultural connection of South Spain with North Africa in later Mesolithic times; to be inferred from the distribution of the microlithic industry. In these caves the evolution of the stylised figures is traceable step by step, and signs remarkably like some of them are found, not only in the rock-drawings of Libya, but of the West Sudan desert, and on the prehistoric or protohistoric Egyptian (? Libyan) painted pottery. Were the cave painters, then, these Mesolithic African immigrants who developed an art upon possibly moribund local traditions under improved biological conditions, and returned with it across the Straits? Mr. Burkitt rather seems to favour the idea of an art influence reaching Spain from North Africa.

The caves tend to prove as numerous as the painted Egyptian tombs, and are potentially of analogous immense importance for elucidating problems of Time and Man. So that it is gratifying to learn, even, that there are hopes of

further volumes some day.

Meanwhile a corpus of the stylised human, or possibly human, signs, with indications of colour and in their immediate setting, would be a most useful

stopgap!

In the Preface thanks are rendered to Miss Dorothy Garrod for her help in the production, to the Marquis of Bute for undertaking the cost of the coloured plates, and to Professor Poulton for a generous grant from the Fund for Promoting the Study of Organic and Social Evolution.

E. S. THOMAS

Europe: Archæology. Hauser,

Die grosse zentraleuropäischer Urrasse; ein Beitrag zur Entstehung der weissen Rasse. By Dr. O. Hauser. Pp. 207. Weimar: Verlag für Urgeschichte und Menschforschung. 1928.

Neue Dokumente zur Menscheitsgeschichte, Bd. I. Edited by Dr. O. Hauser. Pp. 332. Same publishers. 1928.

1. That there are sermons in stones may account for their appeal to the emotions, not only in the British Isles but The author of this book on the continent. is at cross-purposes with many of his archæological colleagues, and although he does not explicitly accuse them of parochialism, he discloses his opinion of their minds and morals. It has long been evident that those who venture into lithopolemics should lead a blameless life and own a stainless ancestry. Dr. Hauser attacks with vigour, and incidentally convinces us that his grievances are many. But grievances have no place in science, nor even in archeology, and to confuse the issue by confounding the adversary encourages those personalities which are a joy, if not a penance, to the bystander. The author has, in fact, been provocative in his criticisms of those who disagree with him, and when he says of Breuil and Peyrony (at Combe Capelle)," für sie galt es, immer nur schöne Funde zu sammeln, sie durch Peyronie in aller Welt verkaufen zu lassen, eine volltönende Publication in Paris zu schreiben um dann vom Staat immer wieder Grabungssubventionen zu erhalten," we are in no doubt as to who Some things are goes into the pillory. not done, and others are not said.

Apart from such excrescences, the book (apparently a second edition) is a statement of the author's conclusions concerning what he regards as the first European white race, which he believes to have come in from the East before the arrival of the Aurignacians, with whom it later interbred to some extent, as it had already done with surviving Mousterians. Dr. Hauser finds the implements made by his "Urrasse" in France, Germany, Switzerland, and as far east as the desert of Gobi, whilst Predmost and a few other sites provide him also with skeletal material. What is often called the "warm Mousterian" of Taubach and Krapina is assigned to the New Race, and La Micoque affords the most cherished proofs of the correctness of the author's thesis. There are many illustrations of implements and sections of excavations, and Dr. Hauser has spared no pains to assure the reader of the firmness of his convictions. He is typically scornful of those who cannot see in a flint what he can see, and there is some peril in suggesting that many of the implements figured are more than reminiscent of Acheulean and Mousterian forms, whilst others might be eoliths, or almost any-This is a confession of inadequacy on the reviewer's part, but inadequacy is the fate of most of us when face to face with experts in the refinements of the flint technique of Palæolithic and Eolithic man.

^{*} The curious female figure from Mujeres (Pl. 13), with large circular appendages to the head, is strikingly suggestive of the large-eared, bird-faced Mother-Goddess clay figurines of North Syria, Cyprus and elsewhere.

Dr. Hauser does not rely on typology, alone, however, but also on what he regards conclusive stratigraphical evidence. Whether he is right or wrong can only be determined by a close study of the facts and artefacts, but neither as regards physical characters nor implements does the author's case for separating his Urrasse from the Palæoanthropic series bring conviction.

It is a point of interest that Dr. Hauser regards Homo mousteriensis hauscri (" mein Homo mousteriensis "-and indeed it was his treasure-trove) as representing Acheulean man; the Ehringsdorf skull (1925) and the Galilee skull are both assigned to the New Race. It would appear also that this race left implements in England-but fortunately not in Ireland, as far as is vet known-in Kent's Cavern and in Norfolk.

It is a remarkable book, and the author's many years of enthusiastic labour entitle him to express strong views on the archæological questions involved. Archæologists themselves are best left to the

rigours of their own consciences.

This volume contains over a dozen contributions by German archæologists The projected series of and amateurs. which it is the first part is intended to stimulate the study of the origin and development of man, and perhaps also to chasten and restrain the "Nur-Theoretiker." The editor gives a brief historical introduction, which consists mainly of a translation into German of a large part of Sir Arthur Keith's Presidential Address to the British Association at Leeds in 1927. Amongst other subjects dealt with are new Palæolithic discoveries in the Neandertal, at Markkleeberg (Leipzig), at Miremont and Combe Capelle, and in Westphalia. Neolithic finds in Brunswick and at Ladenburg are described, and there is a long article on the age and origin of the German people, by Dr. Karl Classen. Oberingenieur Fr. Hering discusses "Wiedergefundene Ur-formen," with especial relation to the mechanical principles shown in ancient and modern implements, and their adaptation to the human hand.

The volume is well illustrated, and the series should afford useful opportunities for the publication of much material that might not otherwise be brought to the notice of archæologists and other interested H. S. HARRISON. students.

Europe: Archæology. Kühn. Kunst und Kultur der Vorzeit Das Paläolithikum. By Dr. H. Kühn. Berlin: 1929: Walter de Gruyter & Co. Pp. 503, with 6 coloured and 120 pts. and 8 maps. Price, 40 marks.

Dr. Kühn, the editor of that excellent journal, Ipek, has written a book on the art and culture of quaternary Europe. The title is too modest. It gives no hint that at least a fifth of the space is devoted to the North African art group. This volume, which is yet one more of those immense and painstaking works of compilation at which the German genius excels, is intended to be followed by similar ones dealing with the art of the Neolithic and Bronze Ages, etc. It has taken three years to prepare, and Dr. Kühn has himself visited many of the principal sites in

Europe and N. Africa.

After an introductory chapter sketching what is necessary of the Palæolithic background-the thorny problem of the number of glaciations in the ice-age is passed over as being purely geological and irrelevant —Dr. Kühn divides his subject into three parts corresponding to the main groups: Franco - Cantabrian, the Eastern Spanish and the North African. of these parts he precedes his discussion of the art itself with a long chapter giving the history of the discovery of the various sites. their excavation and publication, together with accounts of the problems they evoked and the opinions expressed about them. These chapters are most useful. The last chapter of the book discusses the religiomagic significance of the art as a whole. There are 120 photographic and six coloured plates, 8 distribution maps and many lineblock figures in the text.

I suppose Dr. Kühn himself would attach most importance to the North African He believes boldly chapters of the book. that this art group is of Palæolithic date, such considerations as the presence among the engraved figures of Bubalus antiquus and other animals no longer indigenous to N. Africa having led him to this conclusion. It will be remembered that in Hadschra Maktuba Dr. Obermaier expressed

no final opinion on this point.

As an interesting book of reference Dr. Kühn's work is invaluable and should have M. B. a great success.

Witchcraft. Kittredge, Witchcraft in Old and New By G. L. Kittredge. England. Harvard University Press. 1928. Pp. 641. Price 27s.

Professor Kittredge has written a book on witchcraft of a type which is rather unexpected in these days. Its prototype is the Sadducismus Triumphatus of Joseph Glanvil, Chaplain in Ordinary to King Charles II. Glanvil treats his subject from the point of view of his times; and though his science may make the modern reader smile, his was an honest attempt to account for certain well-attested beliefs. But that a modern writer on the same subject should have advanced no further in the scientific method than a parson of the seventeenth century is a little surprising. Surely in these days of the scientific study of anthropology, especially of comparative religion, something more is required than a book which seems to have been written more or less as a series of articles. To read the table of contents is to be reminded of the headings of Glanvil's chapters in his Collection of Relations; here are the same mixture of subjects, ranging from haunted men and haunted houses to devil Throughworship and witches' sabbaths. out the book it is evident that the horrors of the witch-trials have affected Professor Kittredge's judgment to an extent of which he is probably unaware. The horrible description of the tortures, the persecution of otherwise innocent persons, especially women, are revolting; but they can be paralleled in the history of any country and are not peculiar to witch-trials. last chapter of the book suggests that in it we have the true reason for writing the volume; for here he urges that the witchtrials of Salem were due to the influence of Old England, while the nobility displayed by the judge and jury in repenting (after the witches were dead) was due solely to New England. To quote Professor Kittredge's own words, "Let us remember " that we are not attacking New England " in 1692, but Old England from 1593 to " 1712." To the ordinary European mind the sensitiveness of the American on the subject of the Salem witches is incomprehensible; and equally incomprehensible is the desire to shirk the responsibility for Professor Kittredge makes a the trials. great point of the rehabilitation of the Rev. George Burroughs, who (if the evidence of the witch-organisation is to be believed) was the head of the Salem coven; the rehabilitation was effected after the man's execution, and Professor Kittredge sees in it something new and extraordinary: "the public repentance and "recantation of judge and jury in Massa-" chusetts have no parallel in the history " of witcheraft." For a historian Professor Kittredge is singularly forgetful; Joan of Arc and Gilles de Rais were executed as witches and rehabilitated; in the case of Joan there was a public recantation and repentance of those of her judges who were still alive. Professor Kittredge's book is, however, a storehouse of facts concerning witch-trials, invaluable to all who are working on the subject. The number of authorities quoted shows the immense amount of research which he has

devoted to the work. It is unfortunate that he did not give those authorities in alphabetical order and so facilitate reference. M. A. MURRAY.

Haiti. Seabrook.

The Magic Island. W. B. Seabrook.
London: G. G. Harrap & Co., Ltd.,
1929. Pp. 320. 19 illustrations in black
and white and 27 photographs. 12s. 6d. net.

Mr. Seabrook in this book has given for the first time, from direct observation, a full and illuminating account of the Voodoo ceremonies and beliefs practised by the negro inhabitants of Haiti. Whilst officially the islanders are Roman Catholics, they preserve, side by side with an allegiance to this imposed religious creed, a. deep-rooted belief in magic and the veneration of a number of pagan gods. Seabrook was admitted to the ceremonies he witnessed as an initiate, just as Sir Baldwin Spencer and his colleague werealways treated as fully qualified members of the Arunta tribe in Australia. privilege has enabled both authors to observe and place on record rites and ceremonies of which we should otherwise be almost totally ignorant. Students of comparative religions will find much to interest them in the Voodoo ceremonies. In the sacrificial rites especially are features that are strangely reminiscent of the Egyptian cult of the Apis Bull, and of the Taurobolium in the rites of Cybele. The animal sacrifices as now carried out are probably the late derivatives of what were originally human sacrifices.

Magic as a potent force is still firmly believed in. The magician in Haiti is employed, like his colleagues in other lands, to rise to the occasion in all sorts of difficult and critical situations. He may cure the sick, raise the dead, avert storms, administer love-charms, and perform a hundred different functions for the benefit of man—or the reverse—as occasion may arise.

or the reverse—as occasion may arise.

This work, though not avowedly an anthropological book, is an important contribution to anthropology. To the scientific reader, accustomed to a cold and ponderous method of presenting a case, to the footnotes, bibliographies and critical apparatus of a scientific memoir, the lightand breezy style of Mr. Seabrook's narrative may come as rather a shock. Having once commenced to read the book, however, no reader-lay or learned-will put it aside, for its interest and charm will hold the attention till the last page is reached. The photographic illustrations. are interesting and well produced, but the drawings by Mr. Alexander King, though striking and skilful, appear to the reviewer, unschooled as he is in this style of art, as grotesquely ugly. There are, doubtless, many, however, to whom the drawings will make a strong appeal.

WARREN R. DAWSON.

Tibet: Ethnography. Bell. The People of Tibet. By Sir Charles

Bell, K.C.I.E., C.M.G. Pp. xx + 319, with 3 maps and 55 plates. Oxford,

In 1910 a Chinese army advanced on Lhasa, and the Dalai Lama sought refuge In 1911 civil war in in British India. China enabled the Tibetans to expel the invaders and his Holiness returned to his capital with generous feelings towards his friends in need. In 1920 Sir Charles Bell was welcomed in Lhasa on a mission of goodwill. His previous service among the Tibetans of Bhutan and Sikkim, and his personal friendships with the Dalai Lama and his ministers give him a view of the Tibetan homeland very different from that of earlier writers whose approach to the capital was banned. This beautifully illustrated "miscellany of facts," as he modestly calls it, is full of interest to the student of human culture. Its purpose is to describe the life of the people in their own homes. Every stratum of society comes within the author's kindly survey, from noble families founded before the Norman Conquest to the humblest beggars, and he has much to say of the women and the children. Religion and other matters he reserves for a later volume.

Indian Buddhism is the chief factor in Tibetan culture, but its rules do not square easily with the Tibetan climate. Animals are abundant but, except in Himalayan borderlands, rice, fruit and vegetables cannot grow, and even barley is difficult to Butchers, of course, must go to hell, but as their sin is pooled among the entire population, it does not amount to much per head. So even high lamas indulge in meat, with a prayer that the yak or sheep they cat may be reborn in a higher state.

Death, too, presents difficulties; fire needs wood, which is scarce; the earth is often frozen too hard for burial: to consign bodies to rivers makes the water unpotable and murder too easy; so corpses are broken up and given to the vultures, inhumation being reserved for infants and the victims of infectious disease, cremation for priests of note, while two or three noble families of high antiquity observe the

ancient rite of embalming.

Tibetans of all ranks are conspicuously courteous, in spirit as well as in form; they resent brusqueness, and an ill-mannered foreigner goes in peril of his life. Women, as usual in polyandrous communities, are treated with great respect, more so even than in Europe; only in the sphere of religion does the Indian tradition of feminine inferiority survive. Above all, and in spite of their merciless climate, the Tibetans are a merry folk; picnics, two or three a month, are a national institution, and even sporting England can hardly rival the annual three weeks' jamboree of prayer and play with which the New Year opens.

Sir Charles has done good service in publishing these pleasing pictures, for the Tibetans are one of the few nations of Asia whose culture has not yet been shattered by the impact of "civilization."

F. J. R.

CORRESPONDENCE.

Sociology.

Radeliffe-Brown.

Bilateral Descent.

To the Editor of MAN.

Sir,-In reply to the letter of 157 Mrs. Seligman I must express regret that I failed to make my meaning clear. May I offer

a few explanations?
By "descent" I understand membership of a closed group (social segment) determined at birth by the fact that a parent belongs to that group. Even if both parents belong normally to the same group, as in Indian castes, descent is not properly "bilateral" since, in North India, it is strictly the caste of the father that determines that of the child.

Mrs. Seligman is "unable to guess" what I mean by "the combination of matrilineal descent groups with patrilineal descent groups in one system." In Ashanti every person belongs to a matrilineal "blood" clan and

to a patrilineal "spirit" clan. Amongst the Ova-Herero every person belongs to a matrilineal eanda and to a patrilineal oruzo. In the Congo region it seems that every person belongs to a matrilineal ekanda and to a patrilineal luvila. In Australian tribes with four sections or eight subsections every person belongs to one of a pair of matrilineal moieties and one of a pair of patrilineal moieties. In the Mara and other tribes we find every person belonging to one of four named patrilineal semi-moieties and to one of two anonymous matrilineal moieties. In the Dieri tribe every person belongs to a patrilineal local horde with its own localised increase cult for certain plants and animals and also to a non-localised matrilineal totemic clan. In many tribes of Eastern Australia every person belongs to a patrilineal horde or local group, generally exogamous, and also to a matrilineal exo-gamous totemic clan. In Ranon (Ambrym) every person belongs to a matrilineal batutun and to a patrilineal builin. In the south-west coastal region of Pentecost every person belongs to a matrilineal moiety and to a patrilineal local clan ("Anthropos," XXIII, 448 s₁q_.). All these seem to me to have something important in common, namely, that they provide adequate social recognition of kinship on both sides and in both lines by means of More comthe two sets of descent groups. monly, of course, where one and only one, set of descent groups is found, the recognition of kinship on both sides is provided in patrilineal systems by a special relation between the child and the mother's group (c.g., the Basuto), and in matrilineal systems by a special relation between the child and the father's group (e.g., Crow).

Mrs. Seligman explains that she applies the term "bilateral descent" only to the systems of Ambrym and Australia, without, however,

giving a definition of the term.

The four sections of Australian tribes are groups of persons who, by the classificatory system, stand in certain definite relations. Thus, in its simplest form, I and my "brothers," "father's fathers" and "son's "sons" form one group. Our fathers and sons form another, and so on. The sections are not descent groups in the ordinary sense, but the system does really include two sets of direct descent groups, often anonymous, namely, one pair of patrilineal moieties each

containing two sections (AD, BC) and one pair of matrilineal moieties (AC, BD). Even if it were correct to speak of the sections as having "bilateral descent," I do not think we should gain anything by the new term. But it is not correct. In most tribes irregular marriages take place, i.c., a man takes a woman outside the section within which he should marry if his marriage is regular. In such instances, in the majority of Australian tribes, the section membership of the child is determined through the mother alone. As the natives put it, they "throw "away the father." The same thing is true of tribes with eight subsections. We know of only one tribe-the Aranda-where, if our information is correct, it is the mother that is "thrown away" and membership of the section is determined through the father. seems to me very misleading to speak of a system of this kind as one of "bilateral descent."

Now as to Ambrym. In Ranon descent in the batutun is matrilineal, and descent in the bwulim is patrilineal. The term "bilateral descent" would therefore seem to be applicable only to the six wor (lines, classes, or, on my terminology, sections). But the wor or " line " is spoken of by Deacon and apparently by his informants always as a subdivision of the patrilineal bwulim. It is true that a wor is constituted by those persons who belong to the same patrilineal boulim and also to the same matrilineal batutun. But does it really help matters to say that these lines, classes or sections have "bilateral descent" when they seem to be considered by the natives as sub-

divisions of patrilineal groups?

Mrs. Seligman's letter raises many points that it is not possible to deal with here, but there is one matter that I must beg you to allow me to refer to.

I do not think that the Australian section system is "a combination of two forms of social organisation" (MAN, June 1929, p. 112, seventh line from bottom of first column). I regard it and the others mentioned above as each being a form of social organisation combining patrilineal descent groups with matrilineal descent groups.

When I use the word combination I do not mean to assume that the elements of the combination once existed separately then were united together; that, to use Mrs. Seligman's phrases, "they actually functioned in two separate societies before the "'combination 'took place." If I say that the English political system combines monarchy and aristocracy with representative parliamentary government by a party system, I do not assume that these three things functioned in three separate societies before the "com-"bination took place." (A woven cloth combines warp and woof, but warp and woof (A woven cloth do not exist till the cloth is made.)

I am sorry that I have also failed to make clear, at any rate to Mrs. Seligman, my general attitude towards history. I am thoroughly convinced that it is impossible to reach a complete understanding of any element of culture-language, art, religion, social organisation-without a profound and extensive study But it must be real history, not of history. conjectured history. We must know in detail how languages, etc., actually have changed. We cannot be helped, I believe, but rather we shall be hindered, at any rate at the present stage of anthropological studies, by conjectures as to how they may have changed. Hypothetical reconstructions of an unknown past do not and cannot add anything at all to cur understanding of the nature of culture and the laws of its growth and change, but, on the contrary, must necessarily be based on assumptions as to that nature and those laws. In the present state of our studies such assumptions cannot be proved and are likely to be wrong.

It would be ridiculous of me to object to anyone who wishes to do so speculating about the past or future of culture or language in any part of the world. I am even quite willing to do so myself, though I think it would be extremely rarely that my speculations or conjectures would be worth making public The thesis of my note in Man (35) was that the attempts to make conjectural history of social organisation (from Morgan to Frobenius and Rivers) have been based on, and have been responsible for propagating, a serious misconception of the nature of kinship and descent, and this has had an unfortunate influence on field-work.

Yours faithfully,

A. R. RADCLIFFE-BROWN.

Sydney, 23rd July, 1929.



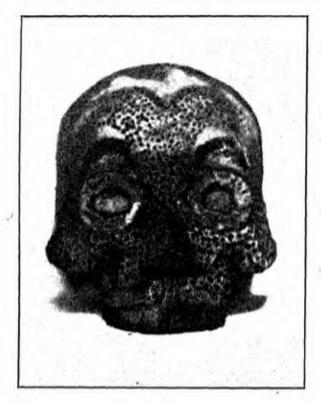


Fig. I.

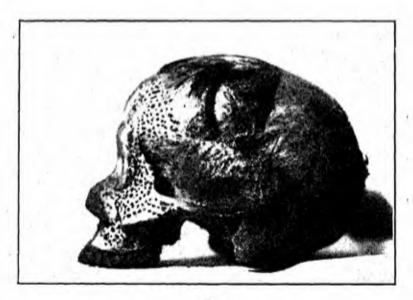


FIG. 2.

SKULL ORNAMENTATION AMONG THE KONYAK NOGAS OF ASSAM.

ORIGINAL ARTICLES.

With Plate M.

Assam: Religion.

Hutton.

A Note on the Method of Skull Ornamentation practised among the Konyak Nagas of Assam. By J.H.Hullon. With Plate M.

Early in 1928 I learnt of the practice by Chi, a trans-frontier Konyak Naga village, of a custom of ornamenting the skulls of dead chiefs, but was unable to see or obtain a specimen till July 1929, when I came by the one illustrated here. (Pl. M, Figs. 1 and 2.)

Some of the hair of the dead man is stuck on to the forepart of the skull, in front of the spot where his hair was parted in life, to form a sort of fringe. The orbits are filled with white pith, in the centre of which the eye is represented by a bit of looking-glass, and a nose of pith is also provided. The whole is painted in blue pigment (? indigo dye from Strobilanthes flaccidifolius) with the tattoo pattern used in life. The skulls are probably kept in pots covered with flat stones* and produced on special occasions and feasted. If so produced they are probably placed on some sort of seat and covered at the back with a cloth, as in the administered village of Namsang, where, however, the skull is not provided with artificial eyes and nose, and the forehead is painted with a miniature of the chest tattoo pattern, since Namsang does not tattoo the face. In Kongan paint seems also used to represent the hair.

The addition to skulls of imitation eyes and noses is, of course, well known in Oceania. Ratzell (I, 190) illustrates one from the Marshall Islands. Frazer ("Belief in Immortality," I, 398) refers to the painting of skulls of relatives in New Britain, and there are skulls with artificial eyes from Astrolabe Bay, Rubiana, Malekula and Torres Strait in the Pitt Rivers Museum at Oxford. Hose and McDougall do not seem to mention the practice in Borneo, but Ratzell (I, 135) illustrates an enemy skull from Borneo with painted top, hair, and artificial eyes and nose, and Marryat ("Borneo and the Indian Archipelago," p. 13) speaks of heads (of enemies, that is) fantastically painted and having pieces of wood, painted to imitate eyes, inserted into the sockets.

It will be noticed that the specimen photographed lacks the lower jaw. The sanctity which attaches to the lower jaw is so great that even the depraved individual who was prepared to abstract and alienate his noble relative's skull dared not take away the lower jaw. That, he said, was incredibly tabu. This importance of the lower jaw is obscure, but may be observed in many parts of the Naga Hills and adjacent areas. The jaw of an enemy head is separated from and separately disposed of in many Konyak villages, and does not come with the skull to the chief's veranda. On the other hand, it is not separated from the skulls of ancestors, and in many villages is preserved with the skull in the case of enemy heads also. In the Khasi Hills, as in Borneo, the lower jaw of an animal slain at the funeral feast is the part specially associated with the remains of the deceased. An expression in Chang Naga possibly indicates the inwardness of these practices. To signify a yawn the Chang says "sou sai-ta," i.e. "the ghost is dancing," sou

^{*} See Mem. Asiat. Soc. Bengul, XI, i, "Diaries of Two Tours in the Unadministered Area East of the Naga Hills " (1929), Pl. 9, Fig. 3. Mon is the next village to Chi, and the customs of the two are almost identical.

[†] M.A.S.B., loc. cit., p. 36.

[‡] Ibid. p. 35, and Pl. 6, Figs 2 and 4.

[§] Gurdon, "The Khasis," p. 132 (2nd edn.).
¶ Hose and McDougall, "Pagan Tribes of Borneo," II, 65; Hose, "Natural Man," p. 140.

being that particular attribute of a human being which manifests itself as a malignant ghost after his death, with an external resemblance to the dead man, as distinct from yempo, that manifestation of the soul which migrates to another world. I suggest that it is particularly to the lower jaw that the ghost attaches. This ghost, in the Chang Naga belief, at any rate, is mortal and ultimately perishes. Should this view be correct it might furnish a plausible explanation of the Thado practice of not decapitating a bitter personal enemy in the usual way, but of cutting off the upper part of the head so as to leave the lower jaw with the body. The explanation given, that this form of decapitation is useful for the information of the deceased's friends that the slayer was moved by personal animus, is not convincing, whereas if he knew that the deceased had bitter feelings against him he might reasonably expect the ghost to be particularly malignant and better left behind even at the cost of part of the prize. It is worth noting that in Africa a definite belief is found as to the association of the ghost with the lower jaw, for the Baganda separate the jawbones of their kings and build special dwelling-places for them in which the ghost which attaches to them can be consulted.* Similarly we may, perhaps, infer that the executioner in Guinea, who keeps off the ghosts of his victims by hanging their jawbones on the wall of his house,† is possibly able to accomplish this by retaining control of the jawbone to which the ghost attaches, while the Ewe people of Togoland, in Africa, precisely as the Toradja, of Celebes in Indonesia, attempt to induce game to come into their power through their possession of the jawbones of the similar species they have already taken. Is it possible to regard the occurrence of this belief in the attachment of the soul to the jaw in the Indonesian area as implicated in the distribution of the Oceanic J. H. HUTTON Negroids?

Obituary.

Haddon.

The Rev. E. Baxter Riley. By A. C. Haddon, Sc.D., F.R.S. We regret to record the death of the Rev. E. Baxter Riley, of the L.M.S., 159 a Fellow of the Institute. Mr. Riley was born at Burnley on 6th May, 1868, and was appointed by the London Missionary Society to New Guinea in 1899, where he was associated with Dr. W. G. Lawes at the training institution at Vatorata. After the murder of James Chalmers at Goaribari, in 1901, Mr. Riley was put in charge of the Fly River Mission in 1902, and made his headquarters on Daru. In addition to much pioneering work he supervised numerous effective mission stations in the Fly estuary and to the west; at Daru he gathered about him a number of boys and girls, in the education of whom he was ably assisted by his devoted wife, an Australian teacher, formerly Miss J. M. Maclean. Every boy also received instruction in building, mechanical engineering, farming, dairy work, etc. The little launch in which he travelled—and in which my daughter and I have also travelled—was run by engineers he had trained; other boys were responsible for the electric light of the station. Under his care many Papuans have become qualified as teachers and preachers. I can testify to the broad and solid foundation on which Mr. Riley based his education of the natives, and to the affection which he and Mrs. Riley received from them. After a long illness, he died at Lindfield, near Sydney, on 30th August, 1929. Owing to this wide experience and sympathy Mr. Riley had an exceptional knowledge of natives, some of which he incorporated in his only book, "Among Papuan Headhunters," 1925. This book contains a great deal of new and valuable ethnography, despite the fact that the publishers drastically abbreviated his original manuscript. There is no doubt that Mr. Riley had a considerable amount of

^{*} Frazer, "Golden Bough," VI, 167 sqq.

[‡] Ibid. VIII, 24.

[†] *Ibid.*, III, 171. § I, 109.

knowledge of practices that, in his position, he could not publish without offending a certain class of readers. At the time of his death Mr. Riley was correcting the proofs of his Kiwai reader and other publications. He has also prepared a grammar and dictionary. A. C. HADDON.

India: Magic. Gordon.

Momiyāi. By Capt. D. H. Gordon.

It is a strange thing that whereas the generality of natives, even those 160 partially educated, of Northern India (and for all I know of Southern as well), know of and, even though they may joke about it, believe firmly in momiyai, and though this curious specific is now wholly recognized as the peculiar possession of the English in general and the Government in particular, relatively few English people in India have ever heard of it. Now the reason for this is not far to seek. The method of procuring momiyāi is, as I shall explain later, so disreputable that the subject is a delicate one. No amount of ridicule can possibly convince even the superficially educated Indian that we do not know all about momiyai, and share in the benefits of that sinister preparation. I have found the word in a Punjab dictionary written, I think, by a Sikh, where it says: "A very high-priced medicine, said to be extracted "from the human head. This 'Osteocolla,' or rare medicament, in reality consists " of hardened tar, petroleum or lignite."

Penzer, in his notes to The Ocean of Story, gives the following quotations In vol. xi: "This word means literally 'extract of mummie' concerning momivai. " (momiya), and originally meant this. In India it is properly a kind of bitumen, " said to be brought from Persia and elsewhere. . . . It is said to be extracted "from the heads of coolies who emigrate to the colonies, by hanging them head " downwards and roasting them over a slow fire. The threat of extracting from the " head of a child is therefore an active deterrent." This is unquestionably the best threat with which to subdue the cheekiness of the Indian guttersnipe. "Ham tum se momiyāī nikālenge," said with intention, soon sends them scuttling off. In vol. iii we find: "In India a most potent charm known as momiāī can be obtained " as follows: a boy, as fat and black as possible, is caught, a small hole bored in "the top of his head and he is hung up by the heels over a slow fire. The juice " or essence of his body is in this way distilled into seven drops of what is then " called momiāi. This substance possesses healing properties of a supernatural "kind. Sword-cuts, spear thrusts, wounds from arrows and other weapons of " warfare are instantly cured by its use, and he who possesses it is practically " invulnerable."

Whatever the associations momiyāi had in ages gone by, it is now, as I have said already, exclusively attributed to the English. The following authentic anecdote will make this quite clear. An officer of my acquaintance was having a dispute with a station coolie as to the proper payment he should receive, and though familiar with the language he was stumped by the recurrence of the word momiyai, and called his servant to find out what it was the man wanted. The servant said: "Sahib, this man says if you wish you need pay him nothing, but will you give him " a small portion of momiyāi?" As my friend, common to most Englishmen, had not the foggiest idea as to what momiyai might be, the coolie was summarily ejected. Being, however, curious about this momiyai, and not being able to get his servant to admit that he knew what it was, this officer tackled one of his Indian clerks, a man of some education. The clerk for some time, however, proved equally coy. In the end, however, he said: "Well, I know that you will think us very stupid people, " but the fact of the matter is that what we cannot understand is that whereas " when we take leave we occupy our time sitting about doing nothing, you English " people are always wanting to exert yourselves in some form of sport. We can "attribute this to nothing except momiyāi." Pressed as to what momiyāi might be, he said: "When in civil hospitals a man's death is certain, then before life is "extinct the man is taken away to a secret room where he is hung up by his feet and a hole bored at the base of his skull from which the vital essence of the man is extracted. This is momiyāi, and this is why people will move dying relatives back to their homes rather than leave them in hospital."

In corroboration of this particular formula for extraction I would cite the case of a wealthy and shrewd old man who, when he felt that his span of life was finishing, asked to be allowed to make some public benefaction to his local city. It was suggested that he should build a hospital, and in this idea he concurred, and showed the greatest interest. He insisted on having the plans of the hospital shown to him, and when he discovered that the architect had designed one of two storeys nothing would persuade him to sanction it, or to give his reasons for not doing so. His hospital was going to be all on the ground floor or not at all.

There can be little or no doubt what was in the old man's mind. Second storeys were much too far removed from the opportunities of observation to suit him. In

fact a second storey was just calling out for a momiyāī room.

Personal inquiries on this subject, after overcoming the initial coyness, have

brought out the following points and variations :-

First, every villager in Northern India undoubtedly knows of and firmly believes in momiyāī, and, though details may differ, has fixed ideas about the methods by which it is procured, none of them flattering to their English rulers. It is believed, further, that momiyāī is a prime medicinal specific conferring boundless physical and mental energy, and curing all ills; also that it has the properties of a touchstone and is used by the Government to turn base metals into gold and silver; and, moreover, that it possesses talismanic powers securing good fortune and averting evil.

These benefits, taken into consideration together with those enumerated by Penzer, quoted above, are sufficient reason indeed for the temerity of the request of the station coolie. All Indians hope for the best when making the most outrageous demands, so, in that man's mind, at any rate, it is confirmed that the sahibs have momiyāī, but that they are not parting with it, and that mention of it in their

presence is an injudicious proceeding.

Besides those already given there is yet another account of the production of momiyā. In every large city there is supposed to be a place where the manufacture of momiyāi is carried on with the knowledge and consent of Government. To this place strangers to the city, whose absence will not readily be noticed, are lured, and there they are boiled in a large cauldron which boils them away until there remains nothing but that irreducible residue which is momiyāi. Akin to this there is the story of the haunted bungalow near Murree, where, so legend says, once dwelt the Mōm-butti Sāhib who used to lure small native boys by catching their eye in a small mirror and so lead them to this bungalow, where he killed and boiled them, skimming off their fat and from it making candles with magic powers.

Since starting these notes an extremely sketchy and somewhat garbled version has appeared in the *Times of India Illustrated Weekly*, entitled *The Mummayii* (the italics are mine), by H. A. Brinkworth. There is only one paragraph of any interest,

which, if it has been correctly recorded, provides a possible variant.

"The Mummayii, sahib, are boots (evil spirits) that lead a man to the place whence he never returns, where he is bound, and with his head hanging downwards his legs are tied to a branch of a tree; the Mummayii then pierce his head in several places and extract that which is the very life substance and spirit of the man. "From this is made a wonderful medicine which makes men wise and restores their

"lost vitality that they may live well and long. It is sold by the Kabulis."

Why these bhuts should extract this for the benefit of the Kabulis, and in what manner the latter obtain it from the former, is, however, not specified. Further, also, an Englishman is represented as having fallen a prey to "The Mummayii," which is quite at variance with the whole momiya tradition. The point, however, that I should like to emphasise again, which is of no small importance, is that momiyāī is believed by the bulk of the masses in Northern India to be the secret of the superiority of the English, and the indisputable fact that the bulk of the English know nothing about it is universally discredited as a calculated evasion of the truth. D. H. GORDON.

Rhodesia: Religion.

Shropshire.

The Initiation of a Doctor of the WaBarwe Tribe. By the Rev.

Denys Shropshire, C.R.

This year I gave over my holiday of a month to an anthropological research trek amongst the tribes in the north-east of Southern Rhodesia and spent some time amongst the WaBarwe, who fought with the Portuguese as late as 1917. While staying in one of their villages, the head of the village, who is also a Nganga (doctor), told me that he was about to initiate his son into the medical profession, and invited me to the ceremony.

He explained to me that a year ago his son suddenly fell ill and was sent to a doctor, who, after having thrown the hakata (divining bones), told his patient that he was suffering from the possession of a healing Shawe (spirit) and that the spirit would continue to trouble him until he made up his mind to propitiate it by himself becoming a doctor. The patient endured this sickness for a year, until the final propitiation and initiation ceremony took place, which I shall now describe. Though I inquired, I was not told that he endured any other privations except that

he was forbidden to eat certain foods. He certainly looked a picture of misery on the day of final propitiation. For this whole year he had been engaged in learning the art of healing from his father.

When I arrived at the place appointed for the ceremony, which was the open space in front of the Nganga's hut, I saw several reed mats laid on the ground, with a group of men on one side and a group of women on the other, and the Nganga (the father of the initiate) sitting on one of the mats between the two groups of people. On the other mats were a large pot of beer specially prepared some time before, a mutundwi (nganga's round basket) containing medicines, many calabashes for drinking and a decorated and well-carved demo (axe used only in spirit dances), sometimes called by a special name, "kanyimbi."



Fig 1. NGANGA (LEFT) AND INITIATE (RIGHT).

After sitting in silence for a short time the Nganga begins to speak first to the group of men and says: "Chiwuyanyi timwi Chiwuyanyi tibswi ngoma ye Mabswoka. Ngatichimwi harwa ye Mabswoka. harwa hakuna bswokaba kwakutenda warhwa we Mabswoka. Ngatichitambe zwino taneta kutamba, ngati chimwi harwa. Muridzi wa bswoka ndiyanatanga kutonga harwa achipa kuna Bambo Mukombo wa harwa." ("Come, let us drink the beer of the spirits. Come, let us play the spirits dance. Let us drink the beer which has no spirit. Let us thank the beer of the spirits. Let us play now, we are already tired of playing. The owner of the spirit will first divide the beer and give one cup to his father, Mukombo.")

The men reply by "kuridza manja" (clapping their hands ceremonially). The Nganga then turns to the women and says the same words and they reply with a

ceremonial "mhurururu" (noise made with hand to the mouth).

The Nganga then speaks to the Shawe which is being propitiated and says: "Wonanyi mishonga yenyu ne harwa." ("Here are medicines and your beer.") The initiate, who is sitting alone apart from the others, now rises from his mat, puts on a necklace of medicines, takes a muswe (animal's tail) and the decorated kanyimbi

and stands near the pot of beer.

A woman brings a calabash and moves the lid from the pot of beer. The initiate pours some beer from the pot into the calabash, drinks and hands it to one of the group of men, who proceeds to pass it round the whole group. The women now begin to shake their chitsikiri (rattles) and sing until the beer has been passed round to all the men. The initiate then hands the calabash to the women and when all have drunk from it they begin to sing again. The drums are now brought forward and the Nganga (father of the initiate) begins to dance the dance of the doctor's Shawe. All is in full swing now-drums playing, all singing and shaking their rattles and the doctor dancing. Only the initiate is sitting quietly on the edge of the circle. Now and again certain individuals leave the dance and go and kneel in front of the initiate and clap hands ceremonially, talking to him for a short The initiate then goes into his hut, followed by his father, who takes a very fine chiremba (crown of ostrich feathers) and puts it on the head of the initiate, several necklaces of medicines which fall over his chest, a muswe in one hand and a kanyimbi in the other. The initiate is then led forth from the hut and sits on the mat outside provided for him. Beer is then handed round again, and when all have partaken the Nganga speaks to the Shawe and says: "Chiregeranyi munhu atambe" ("Leave this man that he may play" (be well)). The men kuridza manja and women mhurururu and the Nganga begins to dance again and all join in with the drumming, singing and dancing as before for a considerable time. When this dance was over the Nganga said : "Ngatiyendi zwaparara, Shawe ngaregere munhu." ("Let us go, all is finished; Spirit, leave the man.") "Yendanyi ne kurapa wanhu." ("Go and make people well.") The last sentence was addressed to the newly initiated doctor. DENYS SHROPSHIRE.

Britain: Archæology.

Buxton; Higham.

Cave Exploration in the Gower Peninsula. By L. H. Dudley 162 Buxton, Exeter College, and T. F. Higham, Trinity College, Oxford.

During the Long Vacation one of us (T. F. H.) made a preliminary examination of a cave on the northwest shore of the Gower peninsula. The cave lies between

Burry Holms and Blue Pool corner.

It is near other caves which have yielded remains of early man, but does not appear to have been previously explored. It is only accessible for a few hours every day at the right state of the tide, and does not seem at present to have any opening on the land side. The contents of the cave are being slowly removed by the sea at excessive high tides and during storms. The entrance is partially blocked by boulders. The cave itself contains remains of a clayey deposit on or between boulders and round the sides. The deposit is mixed with sand, remains of fires and numerous bones. No traces of human handicraft were found. Three small sackfuls of the deposit were removed (no statification being evident) as a trial. The contents of the sacks were then washed by hand and the results submitted for examination in Oxford. The greater part of the finds consisted of human bones.

Most of them showed traces of fire, but had not the usual appearance of a cremation burial, as they were not thoroughly burnt, and some fragments can hardly have been subjected to fire at all. Curiously enough, the best preserved fragments were those of ribs, which usually are broken, but apart from ribs and one sacrum no complete bones were found. There were some teeth which, apart from one incisor, certainly came from the same individual but, judging by the size and age of the bones, at least two individuals were represented, probably more. The nature of the fragments suggests that they were not found in their original resting-place, but had been carried there, either by water or wave action or, less likely, human agency. There were only three recognizable fragments of non-human bones. These were kindly examined by Miss Dorothea Bate, of the Department of Geology, British Museum (Natural History). Miss Bate reports that they do not provide any evidence of the date of the deposits. They are light, but so are other remains of a definitely Pleistocene date from the Gower peninsula. It seems probable, however, that one is part of the scapula of a sheep, which suggests a recent date. This fragment was, like the human bones, charred. The human bones were also light and I certainly could not express any opinion as to their antiquity, beyond the fact that they are not very recent. With the teeth more definite experiments could be made. With the assistance of Professor Peters the teeth were tested in the Department of Biochemistry in Oxford, under ultra-violet light. One incisor, mentioned above, was clearly more recent than the rest, a result anticipated in the previous superficial examination. The remainder showed only a low degree of fluorescence, very much less than certain Romano-British teeth and less than the oldest teeth from Mesopotamia in our possession, but as conditions are different in Mesopotamia I should not lay stress on this. As the preservative used for our bones has the unfortunate disadvantage of being very fluorescent I was not able to make a comparison with teeth from Neolithic deposits. The use of ultra-violet light at present is not a satisfactory medium as we have no data for comparison, but, inconclusive as the results are, they suggest that the bones, or at least some of them, are of considerable antiquity; but they may be of any date from the Early Iron Age backwards. The fragments are too small to be of racial significance. The evidence does, however, suggest that this cave, and possibly unexplored caves in the neighbourhood, are likely to contain human remains, which may be old.

The purpose of this note is partly to record this summer's work, partly to ask for the co-operation of any who may have previously examined caves in the neighbourhood, even possibly this cave, and partly to say that, if anybody living in the neighbourhood would like to examine the cave further, we shall be delighted to give him particulars about how to reach it and to show him the collection of human remains which we have so far discovered. We hope next year to be able to continue the work, which is urgent owing to the erosion at present in progress.

L. H. D. BUXTON. T. F. HIGHAM.

India : Magic.

Bonnerjea.

Sharp-edged Instruments in Bengal. By Biren Bonnerjea, D.Lit. 163

With regard to sharp-edged instruments quite a number of superstitions and superstitious practices are current in the district of Nadiyâ, Bengal. Some of these are probably remnants of the ancient Indo-Aryan veneration of iron, while others are decidedly meant to frighten the hordes of demons which infest the world. The following notes were taken from personal observation, and afterwards corroborated by conversations with Indian friends.

For peeling, slicing and cutting vegetables, fish and so on, the Hindu women use

an instrument called banti (Fig. 1). It has a slightly curved blade about eighteen inches long, and about five inches wide at its broadest point; this blade is fixed on a flat piece of wood at an angle of about 110°. While not actually in use, the blade must never be kept upright, but the thing should be kept lying on its side on the floor. The reason is that, if it is kept upright, some spirits of the air may be wounded by it. But, if there is a thunder- or a hail-storm, it is advised to put the banti out in the open air, so that the thunder and the hail demons may be frightened by the sight of such a formidable instrument, and desist from their activities.*

The khânrâ, or the sacrificial knife (Fig. 2), is a long, broad, heavy instrument of a half-moon shape, of which the cutting edge is the convex side. It has a human eye painted in red and some other mystical marks on the blade. This instrument is regularly anointed with mustard-oil and vermilion, especially before and after

The

a goat has been sacrificed with it before the altar of the goddess Kåli. Children under the age of twelve are not allowed to touch the khānrā, but I cannot tell what the results will be if they did so.



betel - cutter n instrument Fig. 2.—Sacrificial Knife.

FIG. 1.-WOMAN'S KNIFE.

(Fig. 3) is an instrument Fig. 2. shaped something like a pair of scissors; but it has only one blade. This, too, is regularly anointed, and vermilion is put on it. As a rule the jānti, as the betel-cutter is called, is always

Fig. 3. Betel Cutter.

kept shut except at night, when it is left half open. As an effective means of averting the evil eye it is advised to keep an opened-out jânti under the pillow of a sleeping child.†

Among the superstitions connected with knives and other sharp instruments are the following: Children must not touch knives or similar instruments after dark; and "cheler hate loha" ("iron in a child's hand"), signifying it is something that should not be done, is a very common Bengali saying. Two bantis crossed together foretell a quarrel. When swords and rapiers (talwar, kirić) are put out in the sun to take the rust off, the points must be away from the house and the hilts towards the house. If this precaution is taken no evil spirits will be able to enter the house during the midday hour. Moreover, if they have a cutting edge, no two cutting edges should face each other, lest a violent quarrel, if not bloodshed, follow in the household. Another superstition is that you should never touch a person, especially a child, with the point of a knife, sword, and so on. Such an action, though in fun, suggests an attack, and is therefore to be avoided.

BIREN BONNERJEA.

REVIEWS.

Germany: Archæology. Petersen.

Die frühgermanische Kultur in 164
Ostdeutschland und Polen. By Ernst
Petersen (Vorgeschichtliche Forschungen).
Berlin: Walter de Gruyter. 1929.
Pp. 194 + 36 plates.

Early Germanic is the name applied first by von Tackenberg to the peculiar culture existing between the Baltic, the Oder and the Vistula from early Kallstatt to La Tène I times. The older names, Face-urn (Gesichtsurnen-) and Stone-cist

^{*} Compare (Sir) James G. Frazer, Taboo and the Perils of the Soul, Chapter V; Iron Taboo, pp. 225 sqq.; id., Totemism and Exogamy (London, 1910), vol. ii, pp. 437 sq.; B. Bonnerjea, A Dictionary of Superstitions and Mythology (London, 1928), pp. 143, 287; s. vv. "Knife," "Whirlwind."

[†] B. Bonnerjea, L'Ethnologie du Bengale (Paris, 1927), p. 92. ‡ In European countries two crossed knives foretell a quarrel.

(Steinkisten-) cultures, are rejected by our author as neither exclusively applicable nor sufficiently comprehensive. certainly denote conspicuous features of the culture, but neither of these features is altogether restricted to its area nor distinctive of all its burials. dealt with is, it must be remembered, a disputed frontier region, including the famous "Polish corridor," and archæologists of both parties show a tendency to invoke prehistory in support of their national claims. The Polish school, headed by our Fellow Prof. Kostrzewski of Poznan, wish to derive the culture in question from the Lausitz group, which they regard as Petersen, on the other hand, insists throughout on the differences between the two. He draws attention instead to really very striking resemblances between the earliest pottery and grave-goods of his Early Germanic cemeteries (the Grossendorf group) and Scandinavian vases and bronzes. Nevertheless, he is fain to admit that Kossinna's attempt to trace the continuation of this culture in that of the clearly Teutonic tribes inhabiting eastern Germany in Roman times breaks down owing to a complete gap in settlement of 150 years or The attribution to Early Germans can only be justified by assumption, admittedly still unsupported by detailed evidence, that the culture belonged to the Bastarnæ. Actually it disappears totally soon after the end of La Tène I. Whether the title be justified or not, the book gives a masterly account of a little known and The clear but very interesting culture. detailed descriptions, the abundant illustrations and the careful lists and maps make the monograph an invaluable handbook. British archæologists will note with interest the popularity of sunflower pins in this remote district. V. G. C.

India: Ethnography. Roy.

Oraon Religion and Customs. By
Rai Bahadur Sarat Chandra Roy,
M.A., M.L.C., with an introduction by
T. C. Hodson. Pp. xvi + 418, with 20

plates. Ranchi, 1928.

Since 1915, when The Oraons of Chota-Nagpur was published, articles from the pen of Mr. Roy have appeared from time to time in the pages of Man in India and the J.B.O.R.S. on various aspects of Oraon practice and belief that were crowded out of the closely packed pages of that pioneer survey. These and other matters form an important supplement to the earlier volume.

Mr. Roy marshals his facts under five headings. First, he summarises the Oraon spirit-world, adopting a classification which will commend itself to all who are acquainted with Dravidian village life; cults of the tribal dead, spirits, benign and malevolent, of village, clan, and household, down to the sorcerer's "familiar" and, above and beyond all, a supreme God; no otiose alien, but the ultimate arbiter of right and wrong, honoured in every important tribal ceremony. These personal agencies Mr. Roy is careful to distinguish from the mysterious impersonal "potency" latent in the evil eye, the evil tongue, and various animals, plants and other things. The contrast is important, for the Dravidian Oraons attribute to this impersonal power happenings which their "Austric "-speaking Munda neighbours ascribe to the direct action of spirits.

In the succeeding chapters Mr. Roy describes in detail the rites associated with birth, adolescence, marriage and death, the tribal festivals and the sorcerer's art, and closes with an intriguing chapter on "revival movements."

The word "revival" is boldly chosen, but the choice is not inapt. Bhakti, the religion of devotion to one personal God, seems inherent in Dravidian psychology, and it was Tamil bhakti that revitalised the Hinduism of N. India when Islam had laid it low. The Oraons have admittedly borrowed much from their Munda and Hindu neighbours, and their culture has been influenced by missionaries, both To these factors Christian and Hindu. Mr. Roy gives due weight, but his evidence suggests that possibly the bhakti of the Oraons, like their language and their social system, is, in great part, their own.

Oraon culture certainly is a complex heritage, and its study supports the view that in its relation with "Hinduism" Dravidian India has given more than it has received. But Mr. Roy, in spite of his thirty years' intimacy with the tribes of Chota-Nagpur, is never tempted to theorize, not even by Oraon vampires, black cats and "witches' revels" of thoroughly European type. His restraint enhances the value of his work and scientists are deeply indebted to him for this faithful and well-ordered record of facts observed.

F. J. R.

Melanesia: Ethnography. Knibbs.

The Savage Solomons as they were 166
and are. By S. G. C. Knibbs. London: Seeley Service & Co., Ltd. 1929.
Pp. 282. 21s.

A guinea is a lot to pay for this book. A minimum of information, a few good stories and some excellent photographs hardly justify such an expenditure. Mr, Knibbs, who, as Commissioner of Lands, travelled much and had good opportunities for observation, is better on the Solomons

as they are than as they were, on Tulagi than on Rennell. He refused to be discouraged by the gloomy predictions with which he was greeted, and has given us an account of the islands which show him to be a humane and interested observer. It is a pity, however, that his observations run along superficial lines and tend towards bathetic clichés.

J. H. D.

Canada: Ethnography. Birket-Smith.

The Caribou Eskimos: Material
and Social Life and their Cultural
Position. By Kaj Birket-Smith. Copenhagen: Gyldeddalske Boghandel, Nordisk
Forlag (Report of the Fifth Thule Expedition, 1921–24. Vol. V). 1929. 11½ in. ×
7½ in.; 2 parts; map and 121 diagrams and illustrations.

The name Caribou Eskimos was given by the Fifth Thule Expedition to a group of Eskimo tribes occupying the southern part of the Barren Grounds west of Hudson Bay. This small group of tribes seems to be of special importance in the cultural scheme of the polar regions. Mr. Birket-Smith describes and illustrates their dwellings, economic life, means of communication, clothing and personal adornment, manufactures and decorative art, and social life. He shows that where different types occur in the polar regions it is, as a rule, the old ones that are met among the Caribous. This is true of such varied elements as the domed house, the skin boat, legging breeches, prick tattooing and stone cooking pots. The ethnographer concludes from the evidence (ii. 232) that the Caribou Eskimos are the sole remaining representatives of a Proto-Eskimo stage.

Mr. Birket-Smith has added to the main body of his report a long series of most valuable tables (ii. 234–380) showing the distribution of culture elements both among the Eskimos (including the Chukchi and the Koryak) and in Indian North America and Northern Eurasia. There is also a comprehensive bibliography, but no index. The illustrations are adequate, but the same cannot be said of the one small-scale sketch-map.

THEODORE BESTERMAN.

Totemism, Besson.

Le Totémisme. Par Maurice 168
Besson. Paris: Editions Rieder (Bibliothèque Générale Illustrée, No. 10). 1929. 8 in. × 6½ in.; pp. 80; 60 plates. Price, in paper covers, 18 frs.; bound, 22 frs.

It is fitting, for several reasons, that attention should be drawn to M. Besson's xuvre de vulgarisation. As such it is a model. The text is straightforward and intelligible to a person of average intelligence and education; it is based on the

best authorities, a list of whom is duly given. The survey of the subject is accompanied by 60 plates (containing over 100 illustrations) beautifully and accurately reproduced by heliogravure. Two lists of these illustrations are given: a detailed one, giving particulars of provenance, etc., and a summary list at the end of the volume. The latter is made to fold so that it can be consulted simultaneously with the plates themselves. And the volume is published at the equivalent of three shillings. British publishers, please copy!

THEODORE BESTERMAN.

Solomon Islands: Linguistics. Ivens.

A Dictionary of the Language of Sa'a (Mala) and Ulawa, South-east Solomon Islands. By Walter G. Ivens, M.A., Litt.D. Published for the University of Melbourne by the Oxford University Press and the Melbourne University Press. 1929.

This volume completes the studies of Dr. Ivens in the anthropology of the South-east Solomons. It was commenced during his residence as a missionary for several years in Ulawa and South Mala. Besides translations of the New Testament, Dr. Ivens published in 1910 and 1911 grammars of Sa'a and Ulawa and in 1911 and 1914 specimens of Folk-lore. A comprehensive account of the Anthropology was published in 1927. The present dictionary is a revised and extended edition of one published by Dr. Ivens in 1918. It was rendered possible by the author's appointment as a research Fellow of Melbourne University. This enabled him to revisit the islands where his anthopological work was carried on in the native languages and consequently resulted in a large extension of the vocabulary.

The languages are important for several reasons. As the speakers of Sa'a and Ulawa are rapidly changing their customs, and English is everywhere superseding the native speech, this is probably the last possible record of a very typical Melanesian language. With other languages of Mala and the allied languages of San Cristoval, Sa'a and Ulawa are nearer than other Melanesian languages to the Polynesian, especially to Maori and Tongan. For this reason the dictionary will be useful to students of the inter-relation between Indonesian, Melanesian and Polynesian languages, and to those interested in the problem of the origins of Melanesian and Polynesian speech.

The differences between Sa'a and Ulawa are mainly in pronunciation, and there are a few variations in grammar, but the languages are very conveniently exhibited in a single list. Peculiarities in the phonology are the loss of "t" in many words where it occurs in related languages, and the substitution of the glottal stop for "k" or "g" and, occasionally, for other consonants. The language is copious and contains many synonyms. The native words with their definitions and examples (some of the latter being of anthropological interest), occupy 382 pages, and there is an English index. A few of the references to Indonesian languages are inaccurate, but misprints are few. Dr. Ivens has produced a very valuable contribution to the knowledge of Melanesian and Oceanic linguistic.

S. H. RAY.

Solomon Islands: Linguistics.

Waterhouse,

A Roviana and English Dictionary, with English - Roviana Index and List of Natural History Objects. By J. H. L. Waterhouse, F.R.A.I., Member Polynesian Society: British Solomon Islands. Printed at the Melanesian Mission Press, Guadalcanar. 1928.

The Roviana Dictionary of Mr. J. H. L. Waterhouse relates to a little known, but commercially very important language of the Northern Solomon Islands. It is

primarily the language spoken around the Roviana Lagoon in New Georgia, but is rapidly becoming the *lingua franca* of the neighbouring islands.

Roviana differs considerably from the Melanesian languages further south, and, although it has no closed syllables, the vocabulary and grammar show a very distinct form of Melanesian speech. Even related words are often very different as, e.g., the words which appear in Mala, Sa'a, as maau (afraid), ikire (they) are found in Roviana as matagutu and rini.

A peculiarity of the grammar not found in the Southern languages is the use of an infix or prefix in to form nouns from verbs, as, e.g., minate death, from mate to die, inene journey, from ene to go. Similar constructions are seen in New Britain minat death, from mate, winawan journey, from wan go.

The Roviana-English part of the dictionary occupies 136 pages, and the Natural History part 34 additional pages. The book will prove useful to the trader and naturalist and of much value to students of the ethnology of the North-West Solomon Islands. The printing is a credit to the Solomon Islands Press of the Melanesian Mission.

S. H. RAY.

PROCEEDINGS OF SOCIETIES.

Societies. British Association.

Proceedings of Section H (Anthropology) at the South African meeting of the British Association for the Advancement of Science, July — August 1929, at Caps Town and Johannesburg.

Section H (Anthropology), which met under the presidency of Mr. Henry Balfour, F.R.S., had a programme unusually full for an overseas meeting. The papers offered both by visitors and by South African members were of great interest, and so far as time allowed gave rise to lively and important discussions.

to lively and important discussions.

The Presidential Address by Mr. Henry Balfour was delivered at Johannesburg on 1st August. He dealt with the progress in the study of South African archæology since the date of his first visit to the country thirty years ago. He pointed out the need for some form of public body to control and co-ordinate research and emphasized the importance of South Africa as a cul-de-sac into which had swept wave after wave of culture. The address will be printed in full in the Annual Report of the British Association.

Among contributions to the proceedings of

Among contributions to the proceedings of the Section, first place must be given to Miss Caton-Thompson's report on the results of the expedition to Zimbabwe undertaken under the auspices of the Council of the Association with the object of elucidating the origin and date of the ruins of Rhodesia. Miss Caton-Thompson had visited a number of sites and

had excavated the Maund ruins down to bed-rock. Trenches had also been dug at Great Zimbabwe in the elliptical temple, the conical tower and the kitchen middens which went down to below the lowest stratum containing cultural relics. As a result, Dr. Randall-MacIver's conclusions, at which he arrived twenty-four years before, on the occasion of the previous meeting of the Association in South Africa, were fully confirmed. The results of the present excavation went to show that, apart from certain imported objects, the civilization of the Zimbabwe was wholly Bantu in character and could not belong to a date much prior, at the earliest, to the 9th century, and probably was later. Miss Caton-Thompson's report will be published in tull in due course, and ultimately will appear in book form.

Miss Caton-Thompson's report was supplemented by an account of the expedition which had been working in Rhodesia under the leadership of Dr. Leo Frohenius, and by papers from Dr. P. Wagner dealing with pre-European mining in the Transvaal and Southern Rhodesia, and notes on bronze smelting from a smelter in the Waterburg Transvaal.

An almost equal interest was aroused by Mr. L. S. B. Leakey's report on his further excavations in Kenya, which have led to certain modifications of the classification of the East African Stone Age given in previous

reports. A new nomenclature was also suggested. The old First Pluvial and Second reports. new nomenclature was also Pluvial phases are now considered to be phases of the same major event, still, however, to be distinguished by distinctive names as the Eburrian and Endurian. The Eburrian deposits were identified with the Kamasia deposits, which had been referred to the Miocene by Professor J. W. Gregory, but now were found to contain Acheulean imple-These two phases, with the Gamblian (Third Pluvial), Makalian and Nukuran (Post-Pluvial wet phase), have now yielded a com-plete stratigraphical sequence giving Kenya Acheulean, Kenya Mousterian, which at the end of the Gamblian mixed with the Kenya Aurignacian. This, however, like the Kenya Mousterian, existed at the very base of the Endurian series in crude form. It was followed by Elmenteita, which had no exact parallel in Europe, but had close affinities with Magdalenian and was associated with a very fine pottery. In the Post-Pluvial comes culture comparable with the Rhodesian Wilton, and contemporary with it and in the same area is the Nakuran culture, which, closely allied with Wilton, contains a number of crude backed blades not found in the Wilton. This culture is associated with evidence of agriculture, beads, and stone but Human remains were found associated with Aurignacian in Gambles Cave II and are undoubtedly homo sapiens. The Elmenteita series found in 1926-27 are of non-negroid type, while those of the Wilton culture from Willey's Kopje are of negroid type but present features distinguishing them from that type. A tentative correlation of pluvials and European glaciations suggested that Eburrian was probably Pliceene, Kenya Mousterian and Aurignacian belonging to the second half of the Pleistocene and the Makalian to the closing stage of the Pleistocene, the Nakuran being Holocene.

Mr. Leslie Armstrong's evidence from his excavations in caves at Bambata, carried out shortly before the arrival of the Association, was held to support Mr. Leakey's evidence from Kenya. The results of Mr. Armstrong's expedition will be submitted to the Royal Anthropological Institute at an early date.

Mr. Wayland, owing to illness, was unfortunately unable to read his paper on "The Stone Age in Uganda."

Similar problems as affecting South Africa were discussed in a paper by Mr. C. van Riet Lowe on "The Archeology of Sheppard's Island," in which he works out a sequence of culture in the Vaal Valley according to the evidence for three pluviations. Of these the first showed the appearance of early palmo-anthropic man with the Lower Stellenbosch culture; the second, the Upper Stellenbosch, side by side with mammoth, Archidiskodon Sheppardi and Transvaalensis, below the Fauresmith type mixed with older remains of the Middle Stone Age of a distinct Mousterian flavour; and an arid period of considerable duration was followed by the third pluvial heralding a true neoanthropic type practising a later stone age (Smithfield B) industry with marked Capsio-Aurignacian flavour.

The evidence afforded by Mr. Leakey's work in East Africa was further discussed in a communication by Professor Fleure, read at Cape Town, which dealt with the correlation of Pluvial Periods and the glaciations of Europe and their relation to racial drifts as indicated by human remains and types. He deprecated a too close association of types of skull and types of culture in Africa.

A special committee sat for two afternoons to consider a suitable nomenclature for South Africa Stone Age finds and the possible correlation of glacial periods in Europe and pluviations in Africa.

The Abbé Breuil discussed the possible relation between the later palæolithic art of Eastern Spain and the art of the Bushman, concluding that there were possible links. The skeletons and statuettes found at Grimaldi were reminiscent of Bushmen, and between Spain and South Africa are the two rock painting sites of Oran in which engravings of giraffes, ostriches and men were indisof giraffes, ostriches and men were indis-tinguishable from the best Bushmen en-gravings of South Africa. The latter may represent a prolongation of paleolithic art through thousands of years. Miss Wilman also read a paper on Bushman rock engravings. An exhibition of Bushman paintings and engravings was held at Johannesburg, which included part of the collection made by the included part of the collection made by the Frobenius Expedition and aroused much

Mr. R. U. Sayce demonstrated with the aid of a cinematograph the persistence of a South Indian fire-walking ceremony among the Indian settlers in South Africa which has centred in Pietermaritzburg for the last 30 years. It was shown that the caste system survives and is endogamous, though the castes mix more freely than in India. Mr. G. R. Carline dealt with the distribution of the Miss M. A. Murray lectured to a crowded audience on "The Witch-Cult in Modern

Times.

Two papers, one by Mrs. Hoernle on "Social anthropological problems in the Union" and one by Professor Ruggles Gates on "Racial Crossing, afforded a useful commentary on a joint dis-cussion with Section F (Economics) on "The Economic Competition between Advanced and Backward Peoples." This discussion was opened by Professor Clay, who put forward some interesting and suggestive conceptions on the methods by which advanced and backward peoples may come into competition. The discussion served a useful purpose in showing how questions of skilled and unskilled labour and wages are cutting across and complicating the problem of the colour line.

In physical anthropology and ethnology, a sufficiently large group of papers was offered to justify the formation of a separate department which sat for one day at Johannesburg. In this Mr. J. H. Gear dealt with cranial form in the native races of South Africa, his paper being accompanied by a map illustrating the skull form distribution into three main divisions. Dr. Gordon D. Laing and Mr. Gear reported on the Strandlooper skulls from Zitzikama, suggesting that the group of eight skulls showed evidence of a hybridization of

the pure Bush and a more primitive stock which was probably the Boskop. Mr. I. H. Wells described Iossil Bushmen from Zuurberg associated with stone and bone implements and ornaments which appeared to belong to the Wilton culture. He also presented a study of the foot in the Bantu and Bushman which showed that the Bushman foot is distinguished by a large number of special features of which the majority were primitive. A separate study of the muscles of the Bantu foot explained their peculiarities on a phylogenetic basis and indicated a tendency to reversion.

Mr. Gillman presented a comparison of Bush, Bantu and European sacra. Other papers in the Department were by Dr. Lewis R. Shore on "Spinous Processes of the Cervical Vertebræ in Native Races of South Africa," and Mr. Gear on the "Fossil Baboons from Taungs." Professor Raymond Dart, in the full Section, had already described the Taungs skull which, when completely cleared of the incrustation in which it had been found,

showed even more clearly an affinity to a precursor of man, especially in its teeth. Dr. R. Broome also read an important paper on the Springbok skeleton.

Papers on archæological subjects were also read by the Rev. Neville Jones. and Mr. J. Hewitt, while a collection of mammoths and other fossil elephants of the Transvaalexhibited by Professor Dart served to illustrate Dr. Van Riet Lowe's paper.

The Section rose on the day before the termination of the meeting at Cape Town, and proceeded on an archeological expedition to Kimberley, when the McGregor Memorial Museum and a number of archeological sites in the neighbourhood were visited. On Sunday Dr. Broome delivered an address on "Race Types of South Africa," which was much appreciated.

At the close of the Johannesburg meeting, an excursion was made to Zimbabwe, where the members had an opportunity of examining the trenches left open for that purpose by Miss Caton-Thompson.

CORRESPONDENCE.

Africa, East: Weapons.

Driberg.

Africa, East: Prehistory.

Leakev.

Fighting Wristlets.

Sir,—In a note on fighting wristlets (Man, 1927, 29), Mr. Meek refers to a fighting wristlet said to be used by the Lango and Acholi tribes of Uganda and reproduces a wristlet from the British Museum collection. This is also reproduced in the B.M. Handbook (p. 200, 1925 edition), with the attribution "Acholi and Lango." Dr. Lindblom, in his "Fighting-Bracelets" (p. 6, note 8), also uses the B.M. Handbook (1910 edition) as an authority for this wristlet among the Lango, but adds that my book on the Lango makes no mention of them.

No mention is made of them because the Lango never wear them, and I endeavoured to get the attribution corrected in the British Museum some years ago. The specimen was, I believe, secured on the river Tochi at the end of the Uganda Mutiny, on the border of the Lango and Acholi countries, and must have come from an Acholi source. The Acholi, moreover, do not make these wristlets, but obtain them from Nilo-Hamitic tribes to their East. As they are only occasionally worn, they cannot be said to belong even to Acholi culture.

On page 201 of the B.M. Handbook a round hide shield is shown, under the heading "Nilotic shields . . . 3. Lango." It seems desirable to point out that the shield comes not from the Nilotic Lango of Uganda, but from the Lotuko-speaking Lango of the Sudan.

Yours faithfully,

J. H. DRIBERG.

African Pluvial Periods and Prehistoric Man. 479

SIR,—Mr. Wayland's contribution to 173 this discussion (Man, July 1929, No. 88) shows some misapprehension of results obtained in Kenya, where the data from which inferences have been made concerning changes of climate are varied, and lend themselves to the drawing of reasonable conclusions.

In the Nakuru-Elmenteita basin we have a series of stratified lake deposits to which we have given the name Makalian and we have at Gamble's Cave a corresponding deposit which has yielded large flakes or knife-blades, sharp at both edges, of average length 5 to 6 inches, associated with scrapers and fabricators; small backed-blades occur and lunates are common. There is also a wide range of pottery and some bone awls are found. Analogous finds of pottery and tools occur in the Makalian lake deposits. This does not seem to be the same as Mr. Wayland's Magosian, which is rather comparable to our, later, Kenyan-Wilton culture. This and Magosian suggest homologies with the northern variation of the South African Wilton culture and with the Tardenoisian culture of North Africa and Europe.

In our Makalian phase the lakes were clearly of greater extent than now. Our evidence from the Nakuru-Elmenteita basin is fuller than that from the Naivasha basin, where the effects of the Makalian lake are much less marked owing to the subsequent increase of the drainage area, through rivercapture. We do, however, find both lake and river terraces, which we think may be considered to belong to the Makalian phase, in the Naivasha basin.

Below the lake silts of the Makalian phase we have evidence of a period of aridity in deposits of red æolian sand of about one-sixth of a foot thickness in Gamble's Cave, and in an intensely reddened deposit containing kunkar at the Enderit Drift and elsewhere. Under the reddened and kunkar-containing layers are stratified lake silts, the base of which, at Enderit Drift and elsewhere, shows every sign of being an old land surface. This old land surface layer has an irregular form and is rich in rootlet-channels; it passes laterally into a river gravel and this into a stony loam. In these lake and old land surface deposits, and in the corresponding deposits in Gamble's Cave, we find what Professor Breuil has agreed is a typical Aurignacian culture, but with the addition of a large number of lunates and (in the cave) some interesting pottery. In deposits of this same date, in both the Nakuru-Elmenteita and the Naivasha basins, we find sites with a developed Mousterian culture. We have called these deposits the Gamblian series.

Beneath the old land surface on which they rest comes still another series of stratified lake silts which, like those above it, shows no trace of any tectonic disturbance. This series we call the Enderian; both the Enderian and Gamblian occur in the Nakuru-Elmenteita and in the Naivasha basins, with the same break in each case. We tentatively regard Enderian and Gamblian as successive phases of a single

major pluvial period.

The Enderian silts of the Nakuru-Elmenteita basin are poor in tools, but the Enderian series in the Naivasha basin yields both Mousterian and Aurignacian types of tool with marked development from the lower to the upper layers. In this basin many of the implements are of chert and some of obsidian, which in the Nakuru basin is the typical implement material. Mr. Wayland has misunderstood us if he has concluded that we have microliths in these deposits; our smallest implements at this stage are large lunates.

The base of the Enderian is everywhere unconformable upon a series of immense thickness, including stratified ash, diatomite layers and other silts all affected by major faulting. We have called this series the Eburrian and in the latest members of this series are found magnificent coups-de-poing of typical Acheulian workmanship, as well as some more primitive tools and some cleavers.

We thus feel there is ground for inferring a sequence of

(a) a very large lake (Eburrian);

(b) a land surface;

(c) large lakes (Enderian); (d) a land surface;

(c) large lakes (Gamblian);

(f) a phase of great aridity with a land surface;
(g) lakes still large but smaller than the

former (Makalian).

This was followed by an exposure of land surfaces, with colian deposits in caves, and then on these land surfaces in still younger lake silts we get the Kenyan-Wilton and Nakuru cultures. This youngest series we call Nakuran.

The evidence is open to inspection and has been critically examined by some visiting members of the British Association, who have asked us to state that the evidence of the land surfaces between Makalian and Gamblian and Enderian, between Enderian and Eburrian unmistakable, and that the absence of faulting in all deposits above the Eburrian is, in sites hitherto examined, indubitable. It would seem that the archeological sequence is more complete in Kenya than in Uganda, partly because of the rich supplies of obsidian available, and this relative completeness has fortunately permitted us to correlate our results over wide areas in two basins. It has been our good fortune to have a partnership between an archæologist and a geologist, who have striven to check one another's results, and, now that the archeological data have been worked over by members of the British Association both in Kenya and in South Africa, and the stratigraphical evidence has been examined by visiting members of that Association, we feel that the conclusions reached and summarized above have considerable prob-We hope to extend our survey to still ability. further basins in Kenya.

To the question of the correlations between our pluvial and inter-pluvial phases, and phases of Pleistocene and Holocene climates in Europe, we have nothing further to con-We stated our present tribute at present. tentative views in an article in Nature, July 6, 1929, and at the meeting of the British Association at Johannesburg. We must, however, dissent from Mr. Wayland's view that his Magosian is to be equated with the European Bühl. The culture concerned is more akin to our Kenyan-Wilton, roughly contemporary with our Nakuru culture, which has beads of not earlier than the third millenium B.C., as well as indications of

agriculture.

May we be allowed to express our regret that Mr. Wayland should have introduced a personal attack into his article? He and we are working under somewhat different conditions, with different backgrounds of knowledge, at a problem which is in an early stage of discussion. It so happens that we are working in a region of special archæological wealth, and that this part of the Rift Valley from Lake Rudolph southwards beyond Naivasha has experienced very marked changes of water content without, after the beginning of the Enderian, great faulting or tectonic changes in the region between Nakuru and Naivasha. Mr. Wayland seems not to have found such a complete archæological sequence, while his stratigraphical sequence is also apparently less complete. There are doubtless good reasons for this, some of which may be surmised from a consideration of orographical and climatic relations. But, in our opinion, divergence of conclusions may even be valuable as a stimulus to further work, and need not be a reason for disparaging remarks. Yours faithfully,

L. S. B. LEAKEY, Leader. J. D. SOLOMON, Geologist.

The East African Archæological Expedition. September 1, 1929.

Sociology:

Bride-Price.

Raglan.

To the Editor of MAN.

SIR,—Mr. Driberg accuses me of 174 saying that among the Nilotic tribes "a girl is knocked down to the highest bidder in the marriage market." I said nothing so absurd. There is, of course, nothing remotely resembling a public auction, and the range of suitable sons-in-law is limited by a large variety of considerations. What I said was that girls are regarded as a source of wealth, and that "every effort is made to obtain as large a bride-price as possible."

Mr. Driberg says: "Such a surprising statement demands substantiation, as modern

observers do not share this view of native marriage, and it is not corroborated in the literature dealing with the Niloties." not sure whether it is my real or imagined statement that causes Mr. Driberg such surprise,

but assume that it is the former.

When I was in charge of the Lotuko district, I sat in my office or tent day after day while a succession of plaintiffs appeared before me. One would produce a bundle of small sticks as evidence that he had paid so much towards the bride-price, but had lost both price and Another would complain that his bride. wife had run back to her father, who had refused to refund any of the price. A third would allege that a girl, accepted when a child in settlement of a blood-feud, had not been handed over when she reached maturity, and so ad infinitum. On investigation, some of these cases proved to be fifty or a humdred years old, and there can be no question of external influence, as cases were most numerous in areas which had never been occupied or administered before.

There was no question of what Prof. Radcliffe Brown calls an "exchange of sacra." Spears, or other articles of value, were readily

accepted in part payment.

Every reference to the subject by other writers on the Nilotic tribes which I can find, seems to me to confirm my view that among these tribes the payment of the bride-price has no religious or ritual significance whatever, and the writers' use of such terms as bargain, indebtedness, defalcation appears to emphasise the essentially commercial nature of the transaction. The apparent brutality, but not the essential nature, of the transaction is modified by the fact that in the vast majority of cases the girl herself is a consenting party.

Acholi.-Mr. Driberg himself admits that my view is correct, though he attributes the fact to a "change in sentiment." Anuak.—"When a father has a daughter

" whom he wishes to marry to someone whom "he knows can pay a good dowry "defalcation is common and gives rise to "many disputes."—Bacon (S.N.R., V, 121).

Bari .- " If a father notices that a young man " is an adept at cultivating, or that his father " is a rich man, he may wish him to become " a husband to his daughter. A man should " not take his wife to his house till the whole " bride-price has been paid and her father " gives his consent. This, however, is not

" the end of his indebtedness, as he continues

" to make small presents, a sheep or two, every " year."—Quoted by Seligman (J.R.A.I., July 1928, 448). Beir.—"Settling the (bride) price usually

" takes some time. . . . All disputes in these " matters are referred to the chief."-Logan

(S.N.R., I, 245).

Nuba.—"Feuds generally arise over women
"... For example, a Nuba marries a " woman from another hill, his wife runs " away, and her father either refuses or is " unable to return the marriage payment."-(S.N.R., V, 151).

Nuer.—It is the duty of the prospective bride's uncle to make the best bargain he can.

—Jackson (S.N.R., VI, 151).

Turkana.—After the full bride-price has been paid—"If the girl's father is satisfied for it not infrequently occurs that he makes " further demands—the newly married couple "are handed over and the party returns home . . They are accompanied by all the girl's relations, each of whom will demand some form of gift. When they " have been satisfied, to attain which purpose as much as ten camels and fifty goats have " been handed over, they return home." It also appears that exorbitant demands are made on a girl's ante-nuptial lovers,--Emley

(J.R.A.I., Jan. 1927, 177).

Against these we have Mr. Driberg, who says that among the Didinga disputes about bride-price do not occur, "as it would be a heinous breach of good manners to affront "a relation-in-law by legal or any other sort
"of public action." I can only congratulate
Mr. Driberg on having located that clusive
person, the "noble savage," and express my regret that neither in Africa nor in Europe have I had the good fortune to encounter people who thought it a "heinous breach of good " manners" to press for the payment of their lawful dues.

Yours faithfully,

RAGLAN.

Egypt: Prehistory. Sandford; Arkell. The Relation of Palæolithic

Man to the History and Geo-logy of the Nile Valley.

To the Editor of MAN.

SIR,-Through an oversight, Miss G. Caton-Thompson's letter in Man, 1929, No. 97, has escaped our notice until now.

This letter refers to our summary* published in the April number, the MS. of which, we wish to point out, was finished before Miss Caton-Thompson and Miss Gardner read their paper to the Royal Geographical Society. Publication was long delayed, you will remember, by the loss of proofs in the post and by other causes arising from our absence abroad.

We would explain that our primary object with regard to the Mousterian lake-beach in the Faiyum was to connect it with a Mousterian terrace which we had found in the Nile valley nearby, and to measure the rate of fall from

^{*} The full publication by the Oriental Institute there promised is expected to appear before the end of the year.

river to lake, thus for the first time removing the Palwolithic association of Nile and Faiyum from the realm of conjecture and assumption.

We do not claim the discovery of a Mousterian lake, though we might mention that we were the first to determine its level, and that we found abundant unworn implements in the beach and flaking sites upon it, a relation more definite than the "association" of Mousterian implements with lake deposits, of which we had heard previously.

Needless to say we found Mousterian implements on, and mixed with, the shingle of lower (younger) lake-beaches. These were usually waterworn, but in lake deposits, especially those of finer sedimentation, there is no reason why derived implements should not occur in virtually fresh condition. The discovery of Mousterian implements at any level below the 112-ft. beach in association with younger beaches, as recorded by Miss Caton-Thompson, seems to us an essentially normal state of affairs.

The accounts of the history of the Faiyum, as deduced by Miss Caton-Thompson and Miss Gardner, and by ourselves, have a stimulating amount in common, and we would believe that the divergencies of opinion are not nearly so abysmal as they appear in print. This also seems to be Miss Caton-Thompson's view.

Maybe publication of available evidence in full will effect an harmonious solution of existing differences of interpretation. If this cannot be achieved in print, recourse to field collections, notes, maps, and other data might prove successful and it would give us pleasure to put such facilities at Miss Caton-Thompson's disposal at Oxford.

K. S. SANDFORD. W. J. ARKELL. Folklore.

A Correction.

To the Editor of MAN.

176

Frazer.

SIR,-In my book, "Folk-lore in the Old "Testament," Vol. I, p. 86, speaking of the Kikuyu, I say, "The elders of the village sacrifice a pig." In this sentence "pig" is a mistake for "sheep," as I see on looking again at my authority for the statement, again at my authority for the statement, which was an article by my experienced friend Mr. C. W. Hobley, "Kikuyu Customs and Beliefs," published in the Journal of the Royal Anthropological Institute, Vol. XL (1910), pp. 438 sq., where the sacrifice is clearly said to be that of a sheep. To make sure I have consulted Mr. Hobley, and he writes to me (31st October, 1929): "As far "as I know they (the Kikuyu) never sacrifice " as I know, they (the Kikuyu) never sacrifice "pigs: they have none to sacrifice." I am unable to account for my mistake except by a momentary lapse of attention, for which I have no excuse to offer; "pig" can hardly be a misprint for "sheep." I am directing the printers to correct the mistake in the stereotype plates of my book, and I would ask any readers of this journal who possess a copy of the book to make the same correction in their volume. I have to thank Mrs. Fanny A. Paice (Homefield, Send, Surrey) for first calling my attention to the mistake and giving me an opportunity of correcting it. From her I learn that the mistake is repeated on p. 38 of the abridged edition of Folk-lore in the Old Testament. I have instructed the printers to correct it there also.

> Yours faithfully, JAMES GEORGE FRAZER.

ANTHROPOLOGICAL NOTE.

The Edinburgh Branch of the Boyal 177
Anthropological Institute.—The Annual
Report of this branch for the year 1928-29
shows a total membership of 15. Three
members were added during the year, but
a loss of four leaves a net loss of one. The
officers of the year were Sir Everard im Thurn,
honorary president: Professor V. Gordon
Childe, honorary vice-president: and Mrs.
J. C. Johnston, honorary treasurer. Six
public lectures were delivered in the course
of the year.

The following programme has been arranged for the remainder of the present session :--

Tuesday, 21st January.—Donald A. Mackenzie, Esq., F.S.A.Scot., "Asiatic Elements in Celtic Religion." (With lantern.) Tuesday, 11th February.—The Very Rev. Donald Fraser, D.D. The Life and Customs of the People of Central Africa. (With lantern.)

Wednesday, 26th February.—J. B. I. Mackay, Esq., M.A., F.R.A.I., will display and describe his collection of Ethnographical Specimens from Northern Nigeria, at the Royal Scottish Museum.

Tuesday, 11th March.—Professor J. Y. Simpson, D.Sc., F.R.S.E., F.R.A.I. Recent Work on Asiatic Human Origin.



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